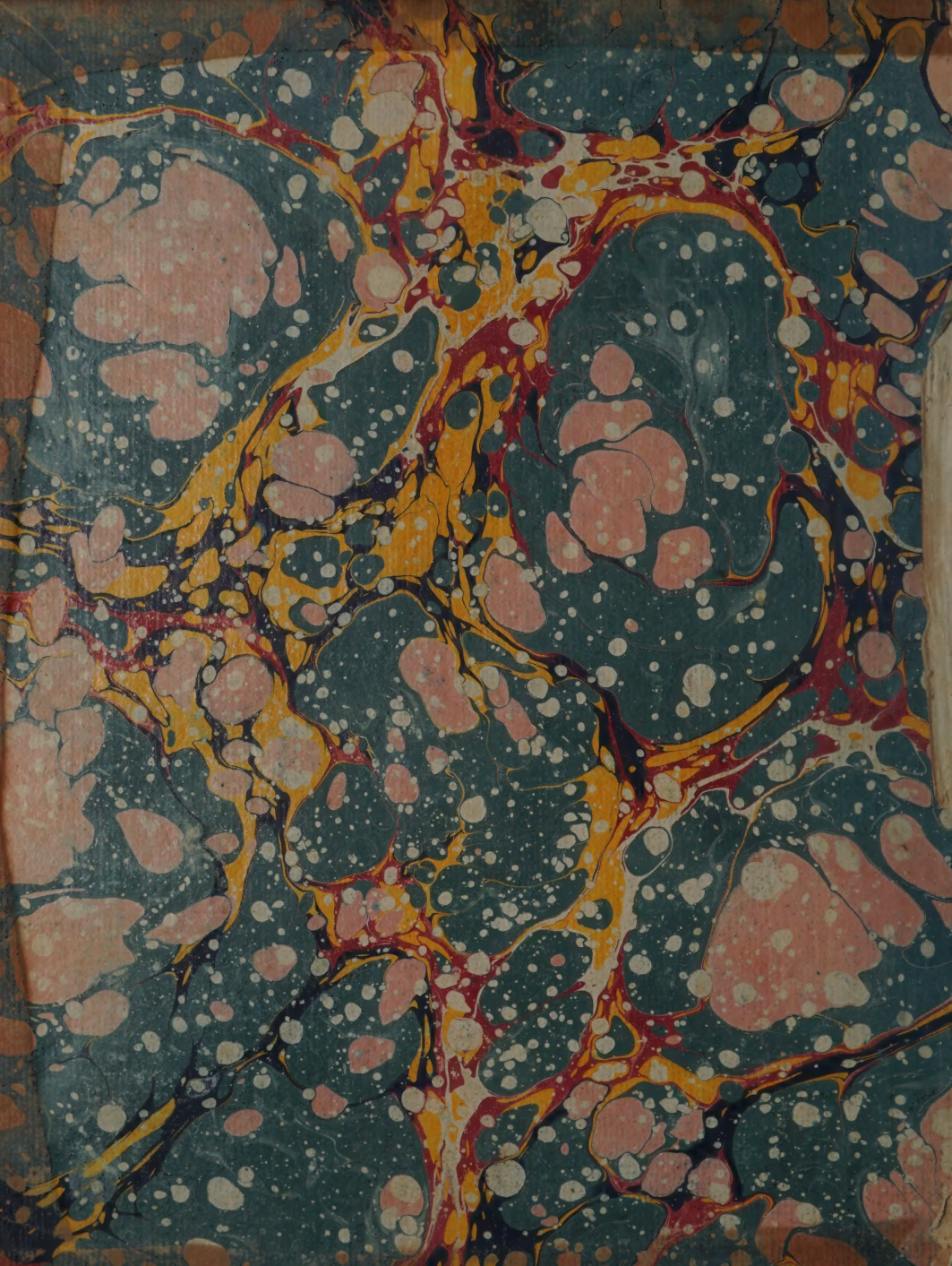
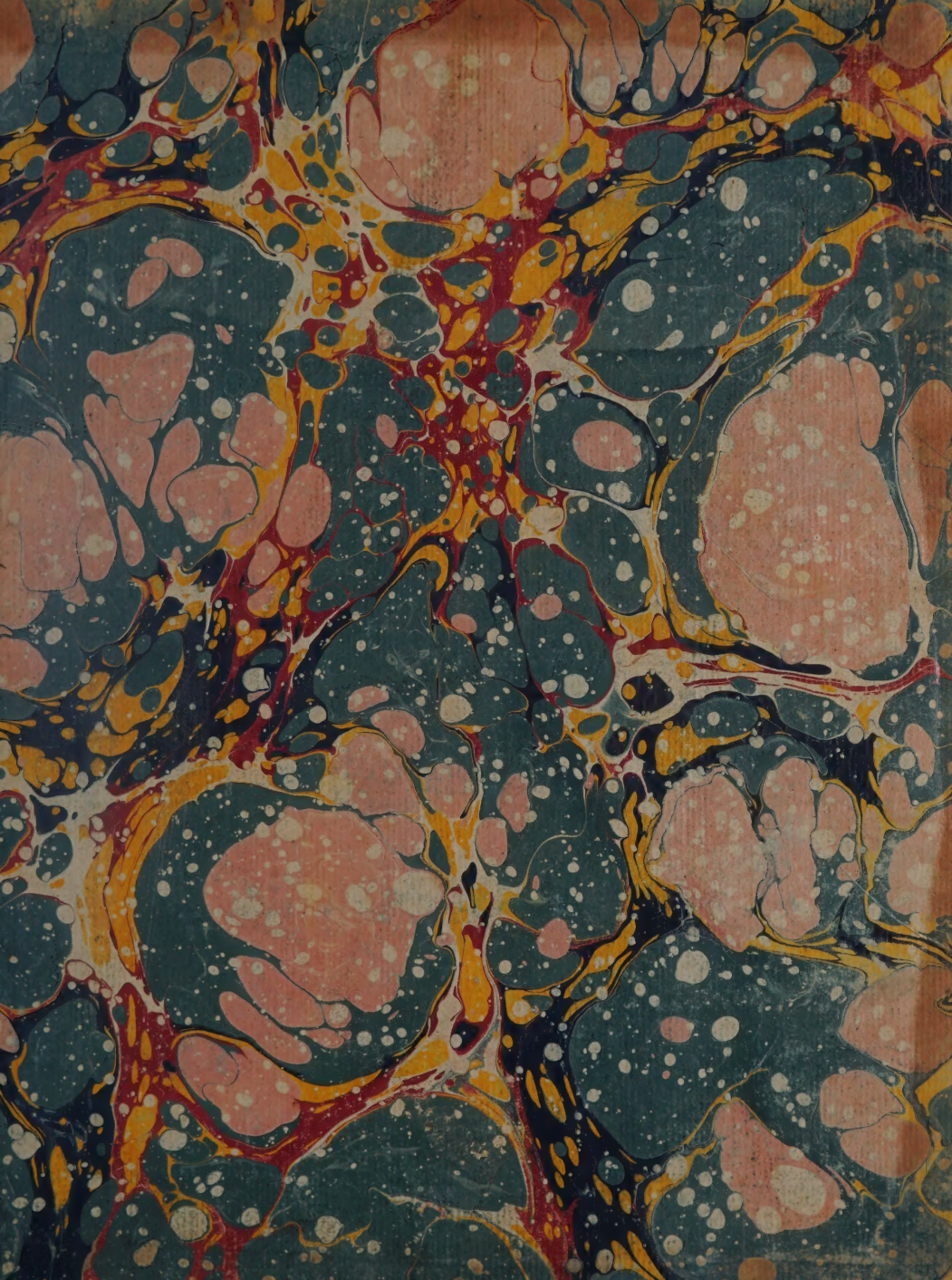








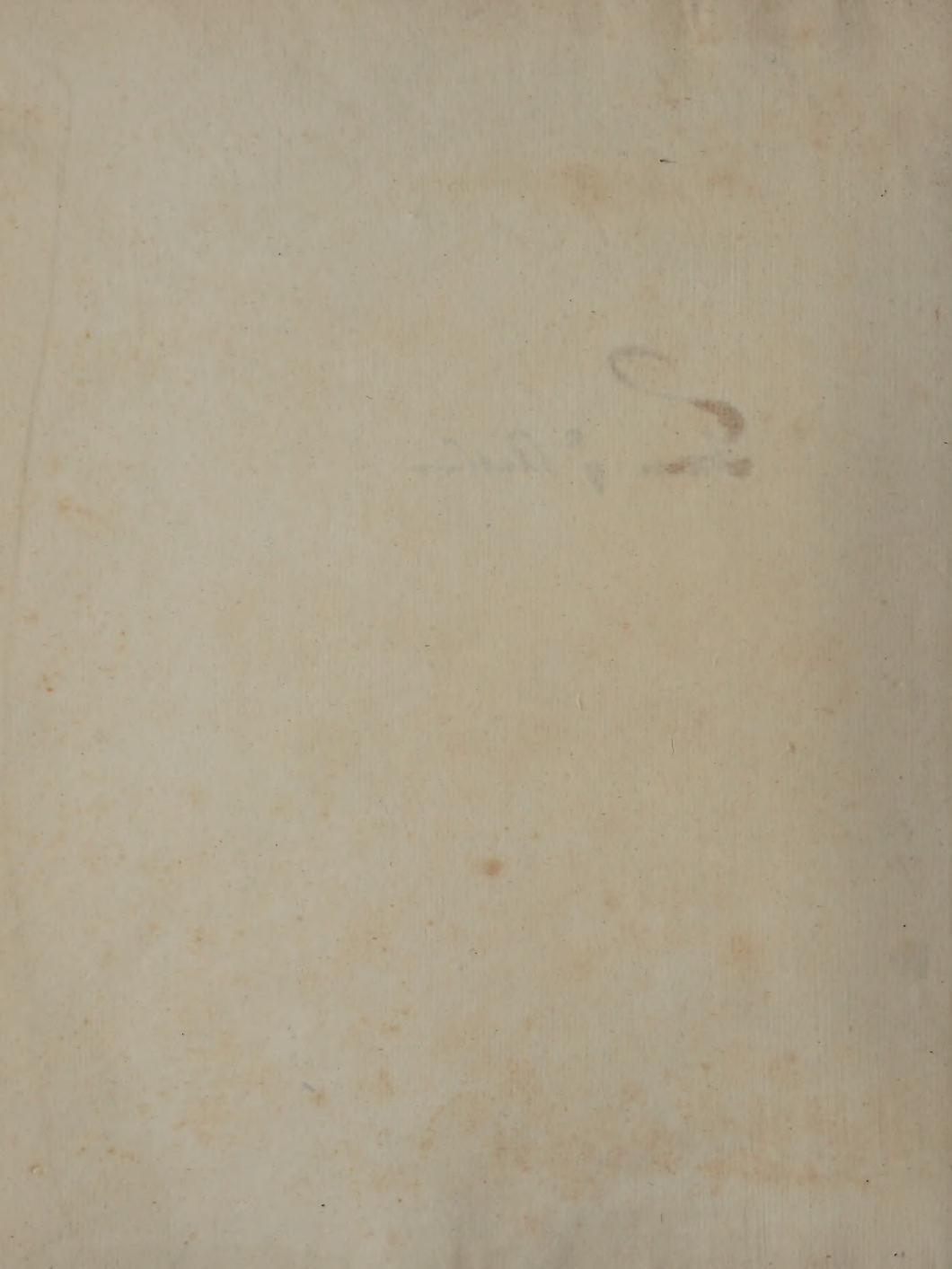
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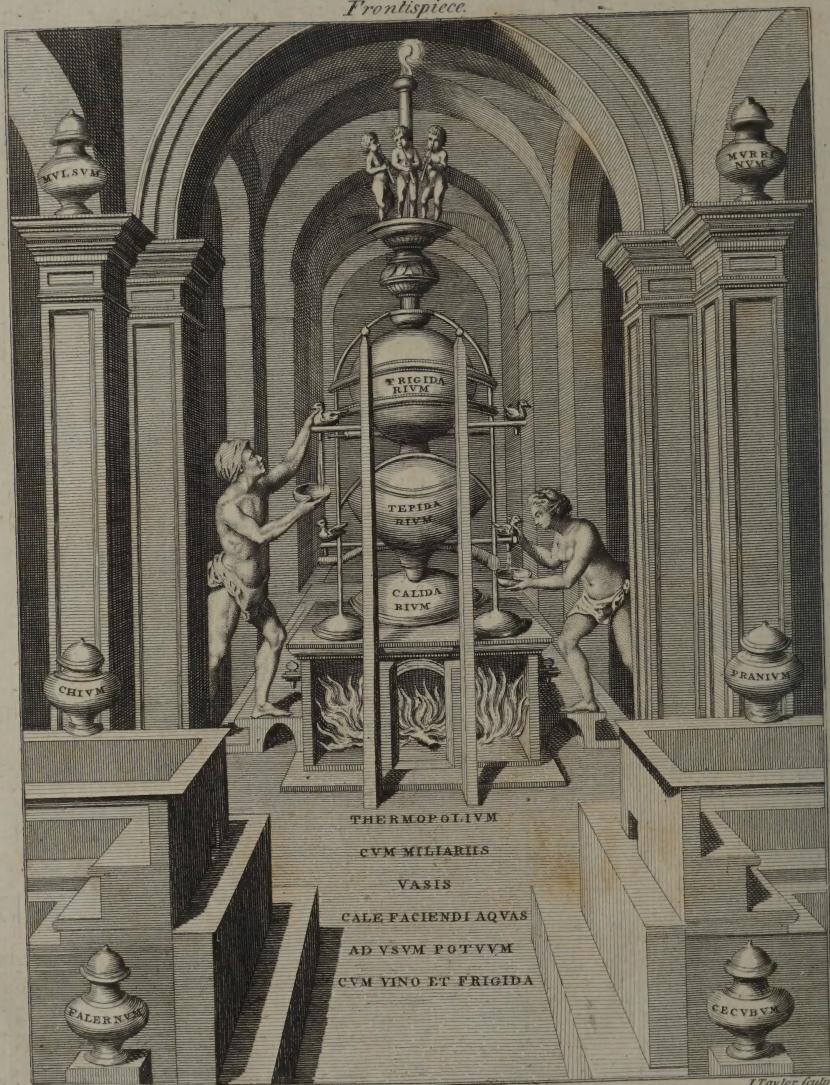
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L. G. G. 1776

From y^e Author



Frontispiece.



O B S E R V A T I O N S

HISTORICAL, CRITICAL, and MEDICAL,

O N T H E

W I N E S O F T H E A N C I E N T S .

A N D T H E

A N A L O G Y between them and M O D E R N W I N E S .

W I T H

General OBSERVATIONS on the PRINCIPLES and QUALITIES
of WATER, and in particular on those of BATH.

Indagatio ipsa rerum tum maximarum tum etiam occultissimarum habet oblectationem. Si
vero aliquid occurret quod verisimile videatur, humanissima completur animus vo-
luptate. Cic. in Lucullo.

By Sir EDWARD BARRY, BART.

Fellow of the ROYAL COLLEGE of PHYSICIANS, and of the ROYAL SOCIETY.

*Jane Taylor, sculp.*

L O N D O N ,

Printed for T. CADELL, in the STRAND. 1775.



T O

Dr. NATHANIEL BARRY.

SUCH persons as have been eminent in the Arts and Sciences, or in a superior station, have generously protected those who improved them, have the most just claim to addresses of this kind : Whilst others, from more private views, have often inscribed them to those, with whom they had formed an intimate friendship, from a similitude in their studies, and manners.

THIS is the real motive, which induces me to dedicate this Book to you, where all these circumstances not only equally concur, but must have received an additional strength from that natural connection, which, without any interruption,

ruption, hath mutually subsisted between us. Neither are eminent instances of this kind wanting.

BUT, I own, it gives me a peculiar delight, when I reflect, that this preference will not be thought a partial one to you ; as it cannot give any addition to that distinguished character you have already established, and can only reflect its lustre on

Your affectionate

Father and Friend,

EDWARD BARRY.

T H E

P R E F A C E.

THE obscurity which prevails in the dietetic and medical rules of *Hippocrates*, for the preservation of health, and the cure of diseases, and in which Wine is a *principal* article, first induced me to enquire into the *general nature* and *principles* of Wines; that I might be more capable of forming a true judgment of the Wines of the Ancients, particularly those of *Greece*, and in what manner *Hippocrates* directed the use of them. From this previous information, it will be more easy to explain the rules he has given, and to place them in a clearer light.

THIS subject is the more deserving of attention, as *Hippocrates* has been universally allowed, by the best judges among the ancients and moderns, to be the first who raised physick from a low and rude state, to a regular *art* and science, and to have laid the true foundation of all medical knowledge ;

a. which

which he greatly extended in his own time, and gave the best rules for the future improvement of it.

THE style of *Hippocrates* is remarkably elegant and concise ; but as he directed his precepts to disciples, who were properly prepared to understand them, he omits several minute circumstances relating to them, or any unnecessary repetition of the rules he had already given.

HENCE, from the distance of time, after so many centuries, many obscure passages must unavoidably occur, not only in *Hippocrates*, but in the best ancient writers, on different subjects ; especially to those who are unacquainted with their style, and general principles. But this obscurity is greatly increased, whenever any *mechanic process* is described, in which there are several *successive* operations, which they always omit, as being *then well known* to all the artists, and only mention the *principal parts* of it.

IT was usual with all the ancients to dilute these Wines, especially those of the strong kind, with a certain

certain proportion of water. This custom prevailed in the time of *Homer*; but *Hippocrates* was the *first* who applied Wines to medical uses, described their various qualities, and adapted these vinous mixtures to different diseases and constitutions.

THE *Materia Medica* was very imperfect and confined in the time of *Hippocrates*; on which account he chiefly depended on his dietic regimen, and made a very extensive use of these vinous mixtures, to answer various, and even *opposite* intentions. Thus by lessening the proportion of water to a certain degree, he made it the most *powerful cordial*; on whose immediate efficacy he could with more certainty depend, and whose force he could restrain within more strict limits, than that of any medicine in his *Materia Medica*. In the same manner, whenever his intention was to *restrain* the motion of the blood, and to make the vinous mixture the most *powerful* and *cooling diluent*, he *greatly* increased the proportion of water to the Wine, which he reduced to so low a degree of strength, as was only sufficient to correct the *inactivity*.

tivity of the *water*, and render it more capable of *pervading* the minute and more distant vessels of the body. But in the former case, the quantity of the Wine is confined; and in a *particular mixture*, directed by him in the most *depressed* motion of the blood, the quantity of water is *equal* to that of the Wine; whereas in the usual mixture of the strongest kind, it always exceeds it. Whilst in the latter case he often mentions his weak mixtures, without confining the quantity of water to any limits; and among the cooling drinks which he enumerates, as being proper in fevers, he mentions one, which is to be composed of *twenty-five* parts of water, and *one* of *Thasian* Wine. These are remarkable instances of the *strength* of the *Greek* Wines, and of the *moderate* and prudent manner in which *Hippocrates* directed them.

It is not my intention to write a particular comment on *Hippocrates*, whenever he directs those vinous mixtures; and I have dwelt no longer on them, than was necessary to illustrate, or explain, some obscure, or doubtful passages, and to make such general observations on his rules of practice, as may more evidently point out his medical intentions.

P R E F A C E. ix

IN this enquiry into the nature and qualities of the Wines of the Ancients, it will be necessary to distinguish the difference between them, when they were made, and drank in their *primitive* or *improved* state, and when the manners and customs of succeeding ages were equally changed. Without this distinction, several accounts relating to them, must now appear not only obscure, but often absurd. This is evident from the different opinions of the commentators, who are particularly perplexed, and generally mistaken, whenever they attempt to explain several passages in the poets, relating to their Wines, and the manner of preparing, and drinking them. These imperfections, however, I do not censure with a critical severity, or impute to a want of superior learning and judgment, for which some of them were distinguished, but to having employed their time to more useful purposes, than inquiring into the minute circumstances of the Wines of the Ancients.

As water was always a principal ingredient in these vinous mixtures, they were not less careful in the choice, than in the manner of preparing their Wines.

P R E F A C E.

Wines with it. This consisted in previously diluting them with boiling water, and afterwards immersing the vessel in snow. The structure of the *Thermopolium* was curiously contrived for the purpose of heating the water; and the best kind of water was conveyed to it, from an aquæduct. This was a very ancient custom; and in some countries and seasons of the year absolutely necessary, not only to make their Wines more agreeable, but salutary. It was revived at *Rome* in the time of *Nero*; and in all their elegant entertainments the Wines were prepared in this manner. They are particularly celebrated by the poets of that age; but the commentators have often mistaken the previous dilution of them with hot water, for the manner in which they usually drank them.

ON these accounts I have been often led into different digressions, seldom foreign to my principal design, but necessary to extend our knowledge of the Wines of the Ancients; and as these, with the manners and customs relating to them, greatly varied in different ages, any description given of them must be obscure and perplexed, unless

less it is fixed and applied to some particular æra. I have therefore chosen to take a short view of them in that period of time, when the arts and sciences flourished at *Athens* and *Rome*, when they were prepared in the best manner, when the use of them prevailed in their convivial entertainments, when the whole apparatus was equally elegant, and their taste most correct. By viewing them in this light, we may be more able to distinguish the analogy between them, and some of the modern Wines, and how far they may be made more grateful, and contribute more to health and social happiness.

NEITHER is this subject undeserving the attention of those, who are desirous of forming a true judgment of the description given by physicians, of the diseases which have chiefly prevailed in different periods of time, and the rules of practice directed by them; for these appearances, and the constitution of the inhabitants, are as much varied by their different manner of *living*, *eating*, and *drinking*, as by the soil, situation, and climate.

I AM very sensible how imperfect a work of this kind must be, and liable to many errors, which may afford an ample field to ill-natured critics, who choose to exercise their talents on it. At my time of life I am little solicitous about their censure or applause; but it will give me a real pleasure to see whatever is *deficient improved*, and what is *erroneous corrected*, by the *candid and judicious*. I have therefore prefixed the following observation of *Cicero*, as a motto most suitable to it. "The investigation into the nature of some things which are *most useful*, but involved in the *greatest obscurity*, is, however, not unattended with some degree of pleasure; but when any discovery is made, which illustrates and gives them a greater appearance of truth, it gives a most sincere and peculiar delight to the mind."

OF THE GENERAL NATURE OF THE ANCIENTS ON THIS SUBJECT, since many are well known more extended by the constant variety of the Wines which they obtained and by different different quantities from the common principles of Preparation, it will give us a more of certainty, and will give us the following

C H A P. I.

Of the general Nature and Principles of Wines.

BEFORE I attempt to give an account of the Wines of the Ancients, it will be necessary to explain the general *Nature* and *Principles* of Wine, and to point out the *essential* Properties, which are requisite to give it that *Character*. It will be then more easy to determine, how far the difference of soil, climate, and culture of the vine, preparation of the grapes, and Fermentation of their juices, contributed to give *various* and *peculiar* qualities to their Wines.

WITHOUT some *fixed Principles*, established by facts and experiments, no distinct judgment can be

B

formed

formed of the Wines of the ancients ; their writings on this subject, after so many ages, must unavoidably in many parts be obscure. They are likewise more perplexed by the confused variety of the Wines which they describe, and by deducing their different qualities from the erroneous principles of Philosophy, which prevailed in those times. Neither can we otherwise discern with any degree of certainty, with what medical intention these Wines, so very various in their qualities, were directed by those physicians in different *diseases* and *constitutions* ; what modern Wines may be best substituted in their place ; or, how far they contributed to the preservation of health, the luxury, or delicacies of life.

WINE can only be made by the *Fermentation* of some particular vegetables, whose juices are either naturally disposed to run into this peculiar *intestine* motion, or by *art* are rendered capable of acquiring it. But whenever they are so far altered by it, as to give by *distillation* an *ardent* spirit, they constitute a true vinous liquor, or *Wine*. This vinous production, however various in colour, taste, and many other qualities, always retains this *permanent*

manent distinguishing characteristic; and this *ardent spirit*, when perfectly rectified, universally contains the *same Principles* and *Qualities*, from whatever *fermented vegetable* juices it is produced.

THOUGH various vegetable juices are, from their their own nature, or by a previous preparation may be made capable of acquiring such a degree of fermentation, as to become perfectly vinous; yet I shall principally confine my observations to those wines which are produced from the fruit of the *Vitis*; and shall dwell no longer on the process of *Fermentation*, than will be necessary to explain several parts of the subsequent Treatise, relative to the peculiar nature and qualities of different Wines, and to illustrate many passages in the ancient writings, which must otherwise remain obscure.

THE *first* property necessary in the grapes, for the production of Wine, is, a sufficient *Maturity*: The juices of austere and unripe grapes, will but weakly and slowly ferment; but those of ripe grapes will excite a more warm and strong fermentation.

4 OF THE GENERAL NATURE

A PROPER *Consistence*, in the expressed juices, is likewise necessary. When they are too *thin*, the succeeding fermentation will be *weak*, the Wine less *spirituous*, and apt to degenerate into an *acetous* liquor; when their consistence is too *viscid*, the Fermentation will be imperfect, and the Wine will be apt soon to acquire a *rancid putrescent* disposition.

A PROPER degree of *Heat* is likewise necessary to promote the fermentation: That which is between *sixty* and *seventy degrees* in *Farenheit's* Thermometer, is, by experience, found to be best suited to it: The *duration* of it likewise varies, according to the climate, strength, and consistence of the expressed juices: It is *stronger*, and ceases *sooner* in hot, than in cold climates; a *South* wind promotes, and a *North* wind retards its progress.

WHEN the expressed juices of the grapes have acquired a proper preparation, they are received into wooden vessels, generally made of *Oak*; in which the fermentation is carried on through its different stages, until it is finished, and the Wine is made.

As this process is exactly and beautifully described by the learned Dr. *Boerhaave* *, I shall only here mention such parts of it, as chiefly refer to this subject, and are necessary to illustrate the observations deduced from it.

In the *first* stage of fermentation, there is a various agitation, attenuation, and intimate mixture, of the different parts of the fermenting materials ; this is succeeded by a gradual collection of a *spumous crust* on the surface of them, which, while it continues, is called the *Flower*, and is in its own nature a most powerful *Ferment*, to excite and increase this motion in all other vinous liquors.

In the *second* stage, the fermenting materials are separated into *three* distinct parts ; the *spumous Crust*, the subsiding *Lees* (which are commonly called the *Mother* of the Wine) and the *intermediate vinous liquor*.

In the *third* stage, the intestine motion becomes more equal and weak ; the spumous crust is gra-

* Hist. Ferment. tom ii.

dually waisted and *absorbed*; and, when that is intirely consumed, and the vinous liquor remains *quiet* on the *subsiding* lees, the Fermentation is then completely finished.

THOUGH several curious changes and productions attend this operation, yet no one is more remarkable, than that active, *elastic*, deleterious *Spirit*, which is perpetually exploded through the open cavity in the superior part of the cask, which if received with its collected strength into the Nostrils of the strongest animal would be immediately fatal: If received in a less quantity by a man he becomes *Apoplectic*; and, if still in a lesser quantity, an *Idiotism* or *Palsy* succeeds this shock of the nervous system. Among many instances of the effects of this active *Gas* or *Spirit*, a remarkable one is mentioned in the *Philosophical Transactions*, of a person receiving this vapour from fermenting *sugar*, which immediately suppressed for some time his *respiration*, and, though he recovered, was the remaining part of his life affected with an incurable *Asthma*. On this account, such who are engaged in these operations, are liable to many disorders of this kind, unless the place is sufficiently large, and the

the windows kept open for the free admission of the air.

HENCE may be explained the various bad effects, which often succeed the drinking of *Wines* in a state of Fermentation ; for if this elastic *Gas* or *Spirit* is so powerful in its full, collected force, on the *Olfactory* nerves, it must, when acting on the nerves of the *Stomach*, though in a less degree, and when received into the circulating fluids, greatly affect the whole *nervous System*. On this account the *Champaign* Wines, which, when well made, deserve a superior place among the fragrant, light generous Wines ; when freely used, in a fermenting state, seldom fail at length to bring on *Tremors* and *Spasms* in the *Nerves*, and *rheumatic* pains in the Joints.

HENCE likewise may be explained, why new recent Wines, *Cyder*, and most of the domestic made Wines, which quickly ferment in the *Stomach*, and create this elastic spirit, are more apt to intoxicate, and affect the head for a short time, than stronger Wines ? And why ripe and acid fruits, which remain long indigested, are apt to bring on violent
Spasms

8 OF THE GENERAL NATURE

Spasms in the *Stomach* and *Bowels*, and, more frequently in warm climates, the *colica pictonum*, with its paralytic consequences ?

THIS Fermentation may occasionally require to be *excited* or *suppressed*. Among the various *ferments*, the *spumous* parts of fermenting Wines, or the subsiding lees, are reckoned most effectual in exciting it ; and afterwards *racking* off the defæcated wines into fresh casks, impregnated with the *vapour* of *fulphur*, will most powerfully *restrain* its progress. These are variously adapted to the state and nature of the Wines. In general, whatever warms and attenuates, will promote a more complete fermentation in vinous juices, which are too *vicid* ; and in those which are too thin and weak, whatever gives them a greater *consistence*.

It is evident from Experiments *, that this fermentation will neither regularly begin, or proceed, under a degree of *heat* less than *thirty-six* in *Fahrenheit's Thermometer* ; and, what is more remarkable, it will neither begin, nor proceed, when the fermenting materials are exposed to a degree of

* Vide Boerh. Hist. Ferment. tom. ii.

heat

heat exceeding that of ninety. In the former case, the *Heat* necessary to excite this motion is *deficient*; in the latter, the active principles of Fermentation are soon dissipated, and the materials acquire such a *Visciduity* as to become *incapable* of it.

HENCE it is evident, that a certain degree of Fermentation is required to change the vegetable juices of grapes into a *perfect* vinous state; and, that when this is either *deficient*, or *exceeds* its proper limits, the Wine will not acquire its genuine qualities, but be more apt to degenerate into a diseased state.

ALL recent Wines, after the Fermentation has ceased, ought to be kept on their lees for a certain time; which greatly contribute to increase their strength and flavour. Whenever this first Fermentation has been deficient, they will *retain* a more rich and sweet taste than is natural to them in a *recent* true vinous state; and, unless a farther Fermentation is promoted by their lying longer on their own lees, they will never attain their genuine strength and flavour, but run into repeated and

ineffectual Fermentations, and soon degenerate into a liquor of an *acetous* kind.

HENCE appears the reason why Wines of the light and austere kind, which have been imperfectly fermented, are so much improved by being exported on their lees, and agitated on the sea? as they thereby acquire a repeated and stronger Fermentation: While those Wines of the same growth, but which have passed through a sufficient, complete Fermentation, or have been prepared in a more favourable season, have been equally injured by it: For all Wines of this class, by a Fermentation too great, or too long continued, certainly degenerate into a weak sort of vinegar; while the stronger Wines not only require, but will safely bear, a *stronger*, and often a repeated Fermentation, and are more apt to degenerate from a *Defect*, than an *Excess*, of Fermentation, into a *vapid*, *ropy*, and at length a *putrescent*, state.

SOME eminent chemical Writers have considered *Putrefaction* as the last process of Fermentation: But *Boerhaave*, who first reduced this art to a regular and a rational system, disapproves, with his usual

usual candour and judgment, this confusion of two operations, which are very different in respect of their *original Materials*, their *Progress* and the *Effects* produced from them : For all *animal stagnating* fluids are the immediate *Objects* of *Putrefaction*, and run spontaneously into it ; neither by any art, can they be rendered capable of a true *Fermentation* : But *vegetable*, succulent bodies, which are *compressed* in such a manner as not to be able to receive the free admission of the *Air* through them, will in *that State* be susceptible of *Putrefaction* ; as is evident in *recent Hay*, when heaped up, before it has been sufficiently dried, for the *Heat* attending it will gradually advance, until it breaks out into a *Flame* ; whereas the heat, which is necessary to the *Fermentation* of vegetable juices, and to advance them to a vinous state, does not much exceed that of an healthy man ; and therefore all succulent vegetable bodies will in that *compressed* state become susceptible of *Putrefaction*, and incapable of acquiring a true *Fermentation* : The effects likewise produced from the *Putrefaction* and *Fermentation* of vegetables are very *different*. By the former, the *saline* and *oily* parts are rendered *volatile*, *fetid*, and *alkaline* ; by the latter, when

justly promoted, they are of a *contrary* nature, and quite *opposite* to Putrefaction : But if vegetable juices imperfectly fermented remain long *stagnating* on their *Lees*, the liquor will soon become *viscid*, and degenerate into a vapid and putrescent state. These observations will hereafter be absolutely necessary to illustrate the rules, which the Ancients frequently directed in the preparation of their Wines, to prevent the *Acor* and *Vappa*, the principal diseases, to which their different Wines were most liable.

WINE, by these rules properly made and prepared, possesses many *peculiar* qualities, and different from any other natural, or artificial production. When taken in a just proportion, it surprisingly strengthens and excites the spirits; and in an increasing quantity gives a quick succession of agreeable ideas, banishes grief and fear, and exalts the latent virtues or vices of the mind : But when too far increased, disturbs, and weakens all the functions of the mind and body ; ends at length in ebriety, insensibility, and all appearances of a temporary *Apoplexy* : These are qualities peculiar to Wine ; for all other *Narcotics* operate in a different manner.

10 OPIUM and *Tobacco* possess some qualities similar to those of spirituous liquors. The *Turks*, who, by the precept of their *Alcoran*, are denied the use of Wine, have recourse to the former, and often use it to animate them, before they engage in battle: While the laborious poor man, who cannot easily purchase Wine, and is unacquainted with *Opium*, finds the same relief from the use of *Tobacco*: They both greatly animate, and strengthen the spirits for some time, neither will they intoxicate those who have been accustomed to them. They both agree in another particular with spirituous liquors, in being in some measure necessary to such who have been accustomed to them; and when long continued, and in a large quantity, they enervate and weaken all the functions of the *Body* and *Mind*.

TEA seems to bear some analogy to them *. An eminent physician of credit and candour, who resided for some time at *Japan*, and who has given the description of this Plant, the manner of its culture, preparation, and qualities, observes, that a

* Vide *Kempteri Amœnitates exoticæ*.

narcotic.

narcotic quality prevails so much in the *Infusion* of it, while *recent*, that the inhabitants are cautious in using it, until it has been gathered two years, and its force more moderated; and perhaps the prevailing, and otherwise unaccountable, fondness of this liquor, is owing to this latent charin which it possesses, but in a milder degree than in other narcotics: For though from its sensible qualities, light astringency, grateful taste and flavour, it may justly be ranked among the nervous *Stomachics*; yet other plants, which more eminently possess these qualities, and have been often recommended, and substituted to supply its place, have never so universally prevailed: Neither can this prejudice depend only on its taste; for that of *Tobacco*, though at first universally disagreeable, is at length preferred by its votaries, to any other of the most grateful kind.

DIFFERENT *Narcotics* produce different effects in particular constitutions: Some, which in their natural state prove *poisonous*, may be so corrected as to become salutary and powerful *Alteratives*: Others have a peculiar influence on the mind, by
remov-

removing anxiety and pain, and substituting agreeable sensations: Hence only can be explained the prevailing use of *spirituous* liquors, *Tobacco*, and *Tea*; the duties on which never fail to bring such extraordinary and constant revenues to the crown: But the abuse of them evidently injures the constitution, and the real equal strength of the *animal Spirits*.

FROM an *Analysis* of Wine, its essential, component parts, are found to consist of *Water*, fine *terrestrial*, *saline*, and oily parts, and the ardent *Spirit*. Different Wines contain these principles in a different proportion: While they are intimately united, the Wine continues *transparent*; but when their *Union* is *dissolved*, the water and spiritous parts evaporate by a moderate degree of heat, and the *saline*, oily, and terrestrial parts subside.

I AM sensible that air is considered by some as a separate principle in all bodies. *Fire* pervades all bodies; and *Air* with *Water*, will penetrate into their deepest recesses, and cement them. But neither *Fire* or *Air* will coalesce with each other, or form a *homogeneous* mass with other bodies. They have
their

their peculiar use when confined within these deep recesses ; but when the component parts of these bodies are dissolved, then the air which had been confined within them, but formed no *concrete* part of them, will continue unchanged, and soon reassume its *genuine* properties.

COMMON spirit of Wine, which is called *Brandy*, is a compounded liquor, and when depurated by distillation, leaves in the still a large proportion of water, and some oily parts, lightly fetid. This, by repeated distillations, is rendered more pure ; but it is very difficult to separate intirely the aqueous parts: *Salt of Tartar* is most effectual to this purpose, which is such a powerful *absorbent* of water, that it becomes moist, when exposed even to the air, though warmed by the heat of the *Sun* ; and therefore when mixed and agitated with the spirit of Wine, will intirely absorb any remaining aqueous parts, and as it rejects any union with a pure spirit, will remain dry in it, when it is thus perfectly rectified.

THE properties of this highly rectified spirit, which the chemists distinguish by the name of
Alcohol,

Alcohol, are very singular and surprising: It is the lightest, and most transparent fluid, next to air, intirely inflammable and volatile, without any remaining *Fæces*, grateful to the smell and taste, quickly coagulates the *Serum* and *Blood* when mixt with them, contracts and hardens the solids, and preserves them both from Putrefaction: When taken inwardly, produces the same effects as Wine, but in a more quick and violent manner. This *Alcohol*, though thus rectified, and which appears to be a simple, uniform fluid, has, by some late curious experiments, been decomposed, and by separating some latent aqueous parts, becomes what is now called the *Æther*.

TARTAR is the real *essential Salt* of Wine, which all recent Wines contain, but in a very different proportion to the other principles of Wine; in which it long remains latent, until by being more attenuated and disengaged, it then is *successively* separated from the very *Center* of the Wine, and equally directed to the *Circumferences* of the cask, in which it is kept: This is a real *CrySTALLIZATION* of these natural salts of Wine, and similar to other operations of the same kind, is never formed, but

D

when

when the liquor is kept in a state of *Rest*. A much greater quantity of it is separated from the *strong acid* and *austere* Wines, than from the *rich* sweet Wines, in which the fine *oily* and spirituous parts, prevail more than the *saline* : On this account the former, while recent, retain a disagreeable austere taste, until the superfluous saline parts are thrown off, and those which are retained become more mild. The rich Wines will likewise continue to be disagreeable, luscious, and heavy, until the oily and spirituous parts are more *refined* and exalted ; to which they entirely owe their peculiar *Colour* and *Fragrancy*. On this account the Wines of this kind, which contain a greater proportion of the saline *refined Tartar*, than others, acquire a more grateful *Pungency*, which eminently improves and distinguishes them, and on that account are called by the *Italians* the *dolce Piceanti*.

MANY distempers, and particularly concretions in the joints and urinary passages, are, by some eminent writers, injudiciously imputed to this tartar in Wines ; but this separation of it is a very gradual and slow process, and never can prevail but in a *quiescent* state, and not possibly while the

Wine.

Wine in a quick motion circulates through the body, or in passing through any of the excretory canals: Neither are these calculous *Concretions*, which are formed in the joints or urinary passages, of the same kind with this vinous salt; but really of a different and opposite nature, as it evidently appears from experiments, that these calculous concretions are of an *alkaline* nature, and this vinous tartar of a penetrating *acid* kind: The *Crystals of Tartar*, which are thence formed, are likewise found to be not only a safe, but an useful aperient, and attenuating medicine, in many cases, and much more apt to attenuate and dissolve such beginning concretions, than to form them.

THE *Maturity* to which different *Wines* may arrive and continue in an healthy state, can only be determined by *Experience*; but, in general, the *strong* Wines will more *slowly* advance to maturity, and be more *durable*, than the *weaker* Wines, which more *quickly* arrive to maturity, and *sooner* degenerate and decay: For Wines, like animal and vegetable bodies, have their different stages of *Youth*, *Maturity*, and old *Age*.

ALL Wines, especially those of the weak kind, either spontaneously, or by repeated Fermentations, will degenerate into a vapid acid kind of vinegar. This observation probably gave the origin to the artificial preparation of a more permanent and pungent vinegar, which is of a very different nature from the former : This can only be obtained by a *regular Process*, from such liquors as have passed through a previous Fermentation ; and as it is a remarkable *second Production* from Wine, possessing very singular and useful qualities, I shall make a few observations on the Changes which it passes through, until it acquires that character ; which will not only point out some rules necessary to be observed in making Wines, but contribute to explain more clearly those which the Ancients pursued, in *preparing*, and *preserving* their Wines.

THIS process has been long known, and is described by Dr. *Boerhaave* with a peculiar accuracy. I shall therefore only mention such circumstances of it which more immediately refer to this subject : Two hogheads are prepared, open at the top, and generally made of Oak ; within a foot of the bottom of these vessels, a *grated transverse* partition

is fixed, on which a sufficient quantity of fermenting materials are placed, until it is loosely covered with them: These materials usually consist of the Stalks, tender Branches, and Bunches of the Vine: The Wine is poured into one of these hogsheds, until it is quite filled, and into the other, till it is half filled. In about two or three days, the Wine in the half filled vessel begins to acquire a *new* Fermentation, and every twenty-four hours the Wine is poured from that which was full, into the vessel which had been half filled, until it is replenished with it. This part of the process is alternately repeated every day; during this time, the full hogshed is kept quite open at the top, for the free admission of the air; but that which is but half full is kept quite covered, and has only a small cavity in the superior part of it, which is occasionally kept open, or closed, by a stopper of wood. During this stage of the process, the Fermentation in the half-filled hogshed gradually increases, and acquires a degree of *Heat*, while in the full and open vessel it is almost entirely suffocated: This *alternate* Fermentation is thus carried on, until it entirely ceases in each vessel. A proper degree of heat is necessary to promote this operation; on
which

which account the *French* always perform it in the summer season, and finish it in about fifteen days.

WHEN the *Vinegar* is thus made, by remaining on its lees, and fermenting materials, it gradually acquires greater *Strength* and maturity, and deposits a large quantity of a mucilaginous, oily, and saponaceous substance, which adhering to the sides of the vessels, and particularly to the *Vine Stalks*, on the *Grate*, must be occasionally cleansed and renewed, until the vinegar acquires a light and generous pungent taste, otherwise it will degenerate into a viscid and vapid state. The hoghead, vine stalks, and branches, which by this operation are strongly impregnated with vinegar, become a more powerful *Ferment* than when *recent*, and such are generally used in this operation.

THERE is a remarkable *Analogy* between the process of making Wine and Vinegar. The former is prepared by the Fermentation of the juices of grapes, *equally* promoted, and suitable to their strength and nature: The latter from a *repeated* and *suppressed* Fermentation of the vinous liquor, that has passed through a previous Fermentation.

The

The *Strength* of the Wine will be greater in proportion to the consistence and *Richness* of the grapes, and the *Degree* of Fermentation: The *Strength* of the Vinegar likewise equally depends on the *Strength* of the *Wine*, and the *repeated* and *suppressed* Fermentation of it; and each acquires a more generous strength and flavour by remaining on their *Lees* for a proper time.

HOWEVER this Vinegar by these operations loses intirely its former qualities, and acquires others very different, and some quite *opposite* to those which it possessed in a *vinous* state.

IN the distillation of Wine, the *spirituous* parts *first* ascend, and if a lighted candle be applied to them they immediately catch the *Flame*. In the distillation of vinegar, the *light* and *aqueous* parts first ascend, and after them the strong, and more *heavy acid* parts, and both immediately extinguish the flame of a candle; the former greatly increases the *Motion* and *Heat* of the blood, and intoxicates; the latter *checks* it, and instead of intoxicating, corrects this quality in the Wine; and when applied externally to the nostrils, or taken internally,

nally, *excites*, and *revives*, in some measure, those who are oppressed and *lethargic* by spirituous liquors : Spirit of Wine mixed with the *Serum* of the blood immediately *coagulates* it, and Spirit of Vinegar more powerfully *dissolves* it, than any other medicine.

It would be foreign to my design to dwell here on the various useful qualities of this *Production* from Wine, in preventing and curing many diseases, especially of the *inflammatory* kind, or on its *anti-septic* powers, in correcting that putrescent disposition, which all animal humours, and particularly the *Bile*, are liable to, in *putrid* contagious *Fevers*, and in that species of *Sea Scurvy* arising from a more slowly fatal, putrid state of the animal fluids.

THE Ancients were not only well acquainted with the medicinal qualities of *Vinegar* in many diseases, but with its efficacy in preventing them *. It was the common drink of the *Roman* soldiers, and every one was obliged to carry with him a bottle of it, which was occasionally mixed with

* Lipf. de Re Militari Roman.

water,

water, and by *Celsus* is called *Pescba*. This was particularly grateful, and useful in extinguishing *Thirst*.

AMONG the different kinds of Vinegar mentioned by them, the lowest was prepared from the acid juices of unripe Fruits, or other Vegetables, or from vapid decayed Wines. Another, which was generally used, was made with more art, from a better kind of Wine: But we find that they likewise made, by a regular process, a superiour kind of Vinegar, from their best and strongest Wines, which was more valuable, and sold at a greater price than the Wine in its original state, as is plainly expressed by *Martial* *. This was highly esteemed by them for its *generous Pungency*, particularly in their favourite pickles and sauces, and was † distinguished by the *Greeks* with various appellations, expressive of its *useful* and *grateful* qualities.

* Amphora Niliaci non sit tibi vilis aceti:
Esset cum Vinum, vilior illa fuit.

Lib. XIII. Ep. cxxii.

† ἡδονὴ καὶ ὀφελὸς τῶν ποσμάτων αἰετον. Vide Hysch. Gronov. Præfat. ad tom. xii. Antiquit. Rom. Dioscorid. lib. xxv. cap. 5. Athen. lib. ii.

THE *Ægyptian* Vinegar, especially that made at
 * *Pharos*, was preferred to any other, in which very
 probably *Cleopatra* dissolved the costly *Pearl*, that
 enriched the bowl of Wine she prepared for *Anthony*,
 and in which the profuse son of † *Æsop* dissolved
 the pearl which he took from *Metalla's* ear: For
 common Vinegar has not sufficient strength to dis-
 solve such substances into a liquid form.

* ————— flebile nati
 Sinciput elixi, Pharioque madentis aceto.

Juv. Sat. xiii.

† Filius *Æsopi* detractam ex aure Metellæ
 Deluit insignem Baccam.

HOR. lib. ii. Sat. 3.

C H A P. II.

Of the Wines of the Ancients.

FROM the most early ages, Wine is mentioned by the *Historians* and Poets, and seems to be almost coeval with the first productions from vegetables: The grapes became, at first, a useful part of their aliment, and the recent expressed juices a cooling drink. These, by a spontaneous Fermentation, soon acquiring a vinous quality, supplied them with a more grateful liquor, which strengthened and exhilarated their spirits after labour.

THE *Indians*, in the same manner, discovered similar virtues in their *Palm* trees; they first made incisions in the bark, with a view of drinking the cooling liquor which distilled from them; but

foon found that by being kept in vefſels, it acquired different and more agreeable qualities.

IN theſe times, they certainly drank their Wine recent and pure, ſoon after the Fermentation had ceaſed ; but obſerving that by acquiring a greater age, it became more generous, they with art and induſtry endeavoured to prepare, and preſerve it for *future* uſe. This probably was the firſt origin and progreſs of Wine : It is mentioned, that *Noah* firſt planted the *Vine* ; and that Wine was offered with *Bread* by the *Patriarch Melchizedech*, amongſt his *firſt Fruits*, as a well pleaſing *ſacrifice* to *God*.

THE *Poets*, who were inſpired by it, celebrate its praiſe ; and not ſatisfied with allowing it to be a moſt uſeful *human* invention, aſcribe it to the *Gods*, to *Oſyris*, *Saturn*, and *Bacchus*, and called it their ambroſial nectar. *Homer* diſtinguiſhes it by the name of *πῶλον θεϊόν*, a divine beverage. In his time the vine flouriſhed, and various Wines were well known ; and by the praiſes which he beſtowed on them, he ſeems, as * *Horace* obſerves, to have

* *Laudibus arguitur vini vinofus Homerus. Epistol. xix. lib. 11.*

often experienced their salutary effects: His heroes were animated by it in their councils, and in the field; and *Nestor* was not more remarkable for his length of years, than for his large draughts of Wine. The women in his time were, equally with the men, allowed the use of it, which by the *Romans*, in the early time of the Commonwealth, was denied to them; and he celebrates *Nausica* for entertaining with it her virgin companions.

The greatest *Philosophers*, *Legislators*, and *Physicians*, give it due praises, when temperately taken; and * *Plato*, who strictly restrains the use of it, and severely censures the excess, says, that nothing more excellent or valuable than *Wine* was ever granted by *God* to mankind.

It appears from the best, and most ancient *Historians*, that the rules for the culture, and preparation of the Wine and grapes, were delivered down from the *Ægyptians*, to the *Asiatics* and *Greeks*, who chiefly improved them, and carried this art to greater perfection. The *Italians* received it from

* *Plato* in lib. de Legibus.

them,

them, and endeavoured to pursue their rules ; and as their soil was particularly favourable to the Vine, they soon spread it through different parts of their country, which became so remarkable for the culture and propagation of it, that *Italy* was distinguished by the name *Oenotria*, and the inhabitants were called *Oenotrii Viri* *.

FROM the difference of the soil, climate, culture, and the various species of grapes, an almost infinite variety of Wines was produced. † *Virgil*, who equally excelled in agriculture, as in poetry, says, you may as easily attempt to enumerate the sands of the sea-shore, as the different species of Wines : The difficulty of ranging them into any regular order, is more increased by transplanting various Vines ; by which their nature and qualities were either improved, or degenerated, as the soil was more favourable, or less similar to that, from which they were removed.

* *Oenotrii coluere viri.*

VIRG.

† ——— neque enim numero comprehendere refert
Quam qui scire velit, Lybici velit æquoris idem
Discere, quam multæ Zephyro turbentur arenæ.

GEORG.

AMONG

AMONG the *Greek* writers, *Dioscorides* has largely treated this subject: He describes the different species of the *Vitis*, their culture, and fruit; the different natural, and artificial Wines (but dwells too long on the latter), their preparations for medical uses, and particularly mentions the principal *Greek* and *Italian* Wines.

GALEN, who was well acquainted with the writings of his predecessors, with his usual activity of mind, endeavours, from *erroneous* principles of Philosophy, to explain and ascertain the *various* qualities of Wines; but gives several useful precepts relating to the different manner of diluting their strong Wines, and other previous preparations, which made them more grateful and salutary. He seems to be not only well acquainted with the *Asiatic* Wines of his own country, but with those of the adjacent *Greek* islands, and the *Italian* Wines, which were most esteemed in his time at *Rome*. However, his sentiments and observations appear very imperfect and obscure; and he refers the reader to another part of his Works, where he expressly says, he had more fully treated this subject. But
this

this Treatise, to which he refers, was either not finished, or more probably lost; and it is very remarkable that the part of his writings in which he mentions this Treatise, is universally allowed to be *genuine*; but that on which his observations on Wines chiefly remain, are, from the difference of of style and manner, justly suspected to be *spurious*. However, his opinions in succeeding ages were held in such veneration by Physicians and Historians, that they religiously adopted them, and often gave the same names to the Wines of their time, which had been given by him to those of a very different culture and quality.

PLINY, in his Natural History, has carefully collected, and reduced into a more regular order, whatever had been written before his time on this subject. He describes the various species and culture of the *Vitis*, and preparation and manner of making the Wines, according to their different strength and qualities. He enumerates several of the principal Wines in *Asia*, *Greece*, and *Italy*, and distinguishes the different nature of the *genuine* and *adulterated* Wines, their true state of *Maturity* and *Decay*. He points out the character, and peculiar

cular qualities of the celebrated *inspissated Wines*, more particularly than any other, and of the *various Antidotes* prepared by *Inspissation* of the strongest Wines, which were then so much esteemed for their medical virtues. But though * he seems sensible of the difficulty of avoiding *Confusion*, and reducing this copious subject to a *regular Order*, yet he frequently runs into that error, and leaves the mind more perplexed than improved. However, he must be always justly esteemed for his unwearied industry, in collecting so many historical facts, of which several are very valuable, others doubtful, and more curious than useful.

ATHENÆUS, who lived at *Rome* in the time of *Antoninus*, wrote a large Treatise on Convivial Entertainments, where the Guests, whom he had chosen to associate on these occasions, were the most eminent in that age, for their various and extensive learning in their different professions; and as Wine was necessary to animate their conversation, he occasionally enumerates, with a peculiar exactness,

* Nulla pars est difficilior tractatu, et numerosior et de generibus singulis inexplicabile, immensum discordibus præsertim medicorum sententiis. Hist. Nat. lib. xiv.

the principal Wines of *Asia*, *Greece*, and *Italy*, and many other curious observations relating to them; as *Galen* was one of the number of the guests, his cotemporary and particular friend, and is chiefly introduced by him in delivering his sentiments on this subject, we may therefore justly conclude that they are more exact and *genuine* than those which remain in his Works, and may supply the *Want* of that *Treatise*, which has been lost. *Athenæus* is more agreeably instructive, as he delivers his sentiments on various subjects in the course of a free and elegant conversation, disengaged from any systematic perplexity: He had a fine genius, and extensive knowledge; and, like another *Grecian Pliny*, has collected and preserved whatever was most curious and valuable, in that, and the former age, which otherwise would have been buried in oblivion.

AMONG the *Romans*, *Cato* and *Marcus Varro*, in their Treatises on Agriculture, have given several useful rules in relation to the culture of the Vine and grapes, and of the Wine made from them. * *Columella*, an illustrious husbandman,

* De Agricultura.

who

who lived in the time of *Augustus Cæsar*, has added several useful rules relative to the preparation of the grapes before their juices are expressed, and the management of the Wines in their different stages, until they arrive at maturity; the observation of which is necessary, more effectually to produce their genuine qualities, and to preserve them in that state.

* *ANDREAS BACCIUS*, a very learned and ingenious physician, published, in the latter end of the fifteenth *Century*, a History of the Ancient Wines. He has collected several material passages relating to the manner in which they prepared and preserved them, in a *genuine*, and an adulterated state. But these rules, collected from the Ancients, are delivered in a very concise manner, and express only the general *successive* operations of making and preparing their Wines, which, though then known to the artists, must appear now very obscure, to those who are unacquainted with the particular *intermediate* processes used by them. Neither does this author extricate the reader from these difficul-

* *De Nat. Vinorum Hist. Edit. Romæ, MDXCVII.*

ties: He has given the best account of the ancient, and the *modern* Wines of his time, but has perplexed the whole by a tedious explanation of their different qualities, from *Galen's* elementary principles and false philosophy: But that was the peculiar error of the age. His observations relating to the different nature of their genuine and adulterated Wines, and of those which were called inspissated Wines, are very curious and useful, and to him we chiefly owe the construction and use of the *Thermopolium*.

THESE are the principal authors who have more particularly written on the Wines of the Ancients; and if *Pliny* in his time expressed a difficulty of reducing them to any regular order, how much greater must it be, after so many centuries have passed? The *Grecians* chiefly improved the useful and elegant arts: There is no doubt but they were perfectly well acquainted with the best rules for preparing and preserving their Wines; and the more closely we examine the remaining accounts of them, the more we shall be convinced, that they far excelled those who succeeded them. I shall therefore, assisted by their observations, and
real

real facts, in which the best authors agree, and from the well established principles of Fermentation and Philosophy, endeavour to explain the general properties and nature of their Wines, and in what material circumstances they differed: I shall not dwell on the various species of them, but chiefly take notice of the principal Wines mentioned by authors of the best credit, and in what manner they were used, and directed by them, to preserve health, or to answer their medical intentions in curing diseases, or contributed to social happiness.

C H A P. III.

On the Rules observed by the Ancients in making and preserving their genuine Wines, and in what Manner they were adulterated.

TO form a more true judgment of the *Grecian* and *Italian* Wines, it will be necessary first to distinguish them into such as were *genuine* Wines, or were artificially prepared or *mixed*.

IN the early times, the *Grecians* certainly made their Wines in their simple state, and soon after the Fermentation had ceased, they were defæcated, and received into other vessels, for more immediate, or future use. They first learned the art of improving their flavour, and making them more durable, from the *Medes* and *Lydians* ; but

as this process was tedious and expensive, and at first only designed for the use of the rich and luxurious, they bore but a very small proportion to the great quantity of Wines, which were then almost universally used in their simple state.

THESE Wines are likewise to be differently considered as being either of a *weak* or *strong* kind, or of an *intermediate* nature between them, of which there are a great variety; but they were generally ranked under that class to which they more nearly approached; and as it was an usual custom among the Ancients to dilute their Wines with water in proportion to their strength, they distinguished them on that account into two general classes of the * Ὀλιγοφόροι and Πολυφόροι, such as would bear a greater or less proportion of Wine, to make them more salutary and grateful.

THE Ὀλιγοφόροι, or weak Wines, were either of the *sweet*, or *subastringent* austere kind. These would not admit of a strong, or continued fermenta-

* Hippoc. de Salub. dial.

tation,

tation, and were apt to degenerate into an acid state; but when well prepared and defæcated, they soon acquired a proper degree of maturity, and were light, sparkling, and agreeable, but not durable. These Wines were drank generally pure out of the hogthead the first year, and are called by *Cicero*, *fugacia*. * *Seneca* (in his Epistle to *Lucilius*) mentions an observation from *Ariston*, in which he points out the early appearances which distinguish the genius and character of young men, and says he should prefer one of a grave temper, though rough and disagreeable, to another who was more lively, and pleasing to the vulgar: For that Wine, which when *recent*, is disagreeably hard and rough, will by time acquire strength, and a grateful maturity; but that which pleases in the hogthead, will not *improve*, or become *durable*.

THERE was another celebrated species of a light, fragrant, and more generous Wine, which was made from the pressure of the grapes on each other,

* Malle se adolescentem tristem, quam hilarem et amabilem turbæ. Vinum enim fieri bonum, quod recens durum et asperum visum est: non pati ætatem, quod in dolio placuit. Ep. xxxvi. ad Lucil.

by their own, or a very light additional weight. These rich juices were only suffered to pass through a light Fermentation; and the Wine when defæcated and transparent, soon acquired a very fine flavour, strength, and fragrancy. * The *Greeks* and *Romans* distinguished this Wine by peculiar names, expressive of its native origin: It was always preserved in new hogheads, which were never pitched externally, or lined with wax internally, and was on that account likewise called *Vinum Sincerrum*; and, probably from the purity and simple preparation of this Wine, *sine Cerâ*, this *Epithet* was originally derived. † *Horace* seems strongly to point out the peculiar nature of this Wine; and some of the finest *Champaigne* Wines are now made in this manner, which will not bear exportation, or continue durable.

It was an usual custom to make some of their best Wines from grapes exposed to the sun for some time after they had arrived to a full maturity, which were distinguished for their delicate taste and

* *Προσωπον πορφυρεον.* Vinum Virgineum.

† Et horna dulci Vina promens dolio. Epod. ii.

fragrancy. Several of them were of the annual kind, and much esteemed for their grateful, light, and generous qualities.

THERE is a remarkable passage in the account given by *Cornaro* ‡ of the rules by which he repaired his constitution, greatly injured by an irregular course of life, until he was forty years old ; by which he afterwards preserved his health and spirits to an hundred years. The efficacy of this regimen chiefly depended on his taking a certain quantity of solids and fluids every day, which last consisted intirely of Wine, and on gradually diminishing the quantity of each as he advanced in years ; during which time he enjoyed an equal state of health, except that sometimes before the Vintage returned, and the new Wine was made, he quickly became so weak and languid, that his physicians declared, that he could not possibly continue to survive many days in that declining state : But on the return of the Vintage, and taking the same quantity of the new Wine, he very quickly recovered his usual strength and spirits. This passage

‡ *Discorsi della Vita Sobria*, del Sig. L. Cornaro, p. 270. Edit. London. 1768.

formerly

formerly appeared to me very surprising, as he observes that the Wine which he constantly drank was of a generous kind, which, when made by a regular and continued Fermentation, must be rather improved by such a moderate advanced age; and therefore undoubtedly the Wine he used, was of this generous *annual* kind, which towards the end of the year lost its fine volatile spirit, *Strength*, and *Fragrancy*.

THESE light Wines, after being well defæcated, were received into fresh casks, and, without any *farther Preparation*, were soon fit for use. But some of the light, and more *generous* kind, though no artificial heats were necessary to bring them to maturity, yet required great care to prevent them from *fretting*, or running into a new Fermentation; and their future strength, colour, and fragrance, chiefly depended on keeping them in a proper quiet situation, until they attained a permanent transparency.

THERE are two principal *Diseases* to which all Wines are liable in their progress to maturity: These are particularly mentioned by the ancient

Writers on this subject, and are called the *Acor*, and the *Vappa*: in the one, they quickly degenerate into a sharp acid; and in the other, more slowly, into a vapid acid; and at length into a *putrescent*, state: The former is chiefly owing to an *Excess* of Fermentation, to which the light Wines are most liable: The other to a *Defect* of it, to which the stronger Wines were most liable. It is likewise necessary to distinguish between the *Rules* which are often promiscuously and obscurely mentioned by writers on this subject, which are not only *different*, but often *opposite*, to each other.

I SHALL next mention the rules which were generally observed by them in advancing their different Wines to a certain state of maturity, which sometimes required such an artificial conduct as made them deviate in some degree from their genuine nature, yet were very different from that artificial mixture and adulteration, which entirely changed their original qualities, or added others to them.

THE sweet, or austere Wines of the light kind, produced from Vines planted on high rocky hills,
in

in a favourable situation, and aspect to the sun, acquired in the first process a greater and more continued Fermentation, and generous vinous state, and more slowly advanced to maturity, than those of the same kind, in a low moist soil. *Greece* and *Italy* abounded with a variety of these Wines; the best of the austere and subastringent kind, which were generally of a red colour; and those of the sweet, or subastringent kind, of a white colour, though classed among the ὀλιγοφθοροί, were light, generous, and durable many years: These required no artificial heats to advance their progress to maturity; nor would they easily admit of any adulteration, or mixture of stronger Wines, which deprived them of their peculiar delicacy and flavour, and their light, but generous qualities, which animated the Spirits, without affecting the *Head*. On which account some of these Wines were justly preferred by many to the best Wines of the *strong* kind.

THESE light generous Wines, though originally well made, required great judgment and attention in this second process, to bring them to a permanent firmness and transparency: Their constitution

tion being light and delicate, was easily affected by any quick changes in the air, or by being too early moved or agitated, and thence disposed to a new Fermentation, which, if not prevented, or timely suppressed, injured, or destroyed their strength, colour, and peculiar flavour.

ON these accounts they were always kept in a cold, quiet situation, defended from external accidents; and whenever any beginning *Fretting*, change of *Colour*, or *Transparency* was observed, they immediately had recourse to such rules of art, which from long experience were most approved: In these circumstances no one was more effectual, or generally used to suppress the progress, than to rack them off into fresh casks, which had been previously impregnated with the *Vapour* of *Sulphur*, and *to remove them to a cooler situation; and when at length they had advanced to a sufficient firmness, they were finally received into new casks, in which they were preserved for future use.

* THE casks in which these Wines were *preserved*, were generally made of Oak, but were

* *Dolia plumbo vincito, vel materie quercina; in Rimas medicamenta indideris, ex cera, resina, et sulphure, quibus dissolutis, gypsum*

more compact than those in which they had been *formerly* kept, and were closely surrounded with hoops made of the same materials, or with *Lead*, and were *pitched externally*, but not *internally*, which effectually defended them from moisture, or the admission of the air; but the best kind of these light and generous Wines were more frequently preserved in the *Amphora*.

THE oaken, or earthen vessels, which were pitched, or artificially prepared, were in the general called *medicated*, and in that sense we are to consider the terms of *Vasa Condita*, and *Medicata*, as relative to these *Casks*; and those of *Vina Condita*, as relative to the Wine, which had been impregnated with other ingredients. The racking of the Wine from one cask into another, is frequently expressed by *diffundere Vina*, or *Vinum diffusum*; which are likewise frequently applied to Wine, whenever it was freed from its former situation, by being poured into Glasses, Bowls, or on the *Table*, or *Ground*, in their *Libations*. These *technical* ambiguous terms, which frequently occur in differ-

sum addito ut densum fiat eoque dolia sarcito. CATO de Re Rustica. cap. xlii.

ent authors, generally perplex the commentators.

THESE generous light Wines would not safely bear being exported in their genuine state, unless they were well made, and in a favourable season; on which account they often mixed them with stronger Wines, to give them more strength and flavour, which were injudiciously preferred by some to that salutary lightness and peculiar flavour, for which these were so much esteemed by others of more taste and judgment. The Ancients were well acquainted with the proper rules of making and *preserving* these Wines, very different * from those which were directed to the strong Wines, and most of them are applicable to our *modern French* Wines of that kind, which for many years have been *mixed* and *adulterated*, and are now very seldom exported in their genuine state.

THE new strong Wines being of a more firm *Texture*, not only required a more continued ori-

* Alia generosa Vina quæ ex navigatione aut vectura beneficium acquirunt et meliora evadunt sicut Plinianis Historiis coram discimus. Alia vero ex adverso levioris substantiæ vectura et navigatione exolescere vel in ipso strepitu viarum suus cellas facile perturbari, colore, et in substantia tabescere. Bacc. lib. i.

ginal Fermentation, but repeated depurations, before they could be safely received into the *Amphora*; in which however they were often apt to grow foul, and lose their colour and transparency, especially when the season was irregular; on which account, the year in which *Opimius* was *Consul*, proved so remarkably favourable to the grapes, that the Wine made from them, was distinguished for its superior qualities and permanency, to any of the preceding or succeeding years.

THE *general Intention* of this second process, was by artificial repeated heats and defæcations, to subdue the stubborn, heavy nature of these Wines; to give them a more *early Maturity*, and firm transparency; and to prevent them from degenerating into a *vapid putrescent* state: on which account, during that time, they were kept in a particular *Repository*, constructed and suited to these purposes, which by the *Greeks* was called * *Αποθηκη*, and by the *Romans*, *Fumarium*. The mechanism of this, and the manner in which they more quickly depurated their strong Wines, had been early known

* Phæd. Fab. lib. iv.

to the *Asiatics* and *Greeks* * : It derived to the *Romans* from the *Massilians*, who were a colony from *Phocis*, and built *Marseilles*, which, even in the time of † *Martial*, was remarkable for its *smoaky Wines*. We have but few traces of the structure of these *Fumaria*, which would have remained more imperfect, had not ‡ *Columella* given us a particular account of the *Fumarium*, in which their *Italian Wines* were then usually prepared. Several tabulated, or long square divisions, were constructed, in which the casks of Wine were sustained, and situated directly over rustic baths, that the heat and vapour arising from them, might be more easily and effectually directed under the casks. There is a

* A Phocide Asiaticus populus navigio Italiam petit cujus pars in Lucania Vesiam, alia condidit Massiliam. Ammian. lib. xv. et Aul. Gell. Noct. Atticæ, lib. x.

† Improba Massiliæ quicquid Fumaria cogunt. Lib. x. Epig. xxxvi.

‡ Fumarium quoque, quo materia, si non sit jam pridem cæsa, fessinato siccetur, in parte rustica villæ fieri potest junctum rusticis balneis. Nam eus quoque refert esse, in quibus familia, sed tantum feriis lavetur. Neque enim corporis robori convenit frequens usus earum. Apothecæ recte superponentur his locis, unde plerumque fumus earum exoritur; quoniam vina celerius vetustescunt, quæ fumi quodam tenore præcoccem maturitatem trahunt. Propter quod et aliud tabulatum esse debet, quo admoveantur, ne rursus nimia suffusione medicata sint. De Re Rust. lib. i. cap. 6.

very

very remarkable circumstance in this process, that this *additional* heat was only *occasionally*, or at *particular* times, directed to the casks in these separate divisions, and that it was then continued in an *equal uniform* manner, with a view of giving to the Wine such a motion and heat, as were sufficient to advance its progress to more strength, and *early Maturity*; and that it was only continued for a certain time, and then the casks were removed to another Apotheca, in a more temperate situation, lest the Wine might acquire a *burnt* or *smoaky* taste; for which the *medicated* and adulterated Wines, especially those which were prepared by the more violent heat of the Fire, have been universally censured.

FROM hence we may form some judgment, tho' very imperfect, of the use and intention of the *Fumarium* in this second process; for *Columella* enumerates this plain kind of repository among the other conveniences, which were absolutely necessary in every *Country Farm-house*, to which some vineyard generally belonged: But in other *Roman Fumaria*, and especially in those of *Greece*, in which they prepared large quantities of Wine, and particularly

cularly their best genuine strong Wines, the whole *Apparatus* was more elegant and convenient.

WHEN the heat from the *Fumarium* was not sufficient to subdue the stubborn nature of these Wines, they exposed the casks on the tops of their houses, to the open air, and influence of the sun. This different preparation of the weak and strong Wines is mentioned by * *Pliny*, and many others. † *Cato* says, that the *Coan* Wine was matured by being exposed *four* years to the sun: But this process was regularly repeated at *stated* times of the year, and generally at the summer solstice, and then only for thirty or forty successive days; and at night the vessels were again returned to the more moderate heat of the *Apotheca*; and this is clearly expressed by ‡ *Galen*. It is with this distinction we must consider *Cato's* account of thus preparing the Wine, by exposing it four years to the influence of the sun, and many other *con-*

* Imbecilla Vina dimissis in terram doliis: Valida expositis: Campaniæ nobilissima Vina sub dio verberibus solis, lunæ, imbrium, exponere aptissimum videtur. PL. lib. xiv.

† Cœum Vinum in sole quadriennio maturari. De Re Rust.

‡ 4 Simpl. cap. xiv.

cise.

cise promiscuous rules, which remain in the ancient writers on this subject, which must otherwise appear absurd. We find this practice is still used, to give a more firm strength and transparency to some of the modern *Spanish* and *Greek* Wines.

As the intention of the repeated heats in the *Fumarium* was gradually to attenuate the viscid texture of the Wines, and separate the most gross parts from them, it was after absolutely necessary to *defæcate* them, and then rack them off into fresh casks, when they had acquired a transparent state. This operation is called *Forcing*, and requires more skill and judgment than any other operation in this second process. Several forms of this kind remain in their writings, which chiefly consist of such ingredients, as, by their *Viscidities*, were capable of *involving* the lees, and, by their superior *Gravity*, of carrying them down. To this purpose they used plain and burnt *Salt*, bitter *Almonds*, the *Whites* of *Eggs*, and particularly *Isinglass*. But when the Wines continued more obstinately foul than usual, they added *Sand*, or *Marble* finely powdered. They were much better acquainted with these arts than our modern Wine-coopers.

coopers, who pretend to conceal, as valuable secrets, some of these common forms; but I do not find that they ever made use of *Arsenic* (or any noxious *mineral* bodies) in fining down their Wines, which certainly, by its very superiour gravity, will powerfully attenuate them, and *force* down any *Lees*, which will in *some Time entirely* subside, perhaps without communicating any noxious quality to the Wine; but the too early use of such Wines has been often succeeded with fatal consequences. I shall mention a remarkable instance of this kind, which came within my observation. Three gentlemen of distinction had drank pretty freely of White Wine, which had been fined down with *Arsenic*. Two of them died in the country in a few days; the other, who came to town, either from the strength of his constitution, or having drank a less quantity, survived: but the effects of it appeared soon in bloody spots over the whole surface of his body; his *Urine*, *Saliva*, and whatever he *hawked* up, or expectorated, was deeply tinged with blood: These appearances ceased in some time, and he became *œdematous*. However he recovered; but though his state of health was from that time very imperfect, yet he married two years

6 after,

after, and died in about four of a *Dropsy*, owing to a total *Dissolution* and *Acrimony* of his humours, from this *mineral Poison*.—Mineral poisons of this kind are generally so violent as immediately to shew their effects in the stomach and bowels; and, unless soon discharged and corrected by emetics, lenient purgatives, and soft plentiful diluents, excite a fatal inflammation and mortification; but how far in a less quantity they may more slowly affect the *Blood* and *nervous* system, can only be determined by future observations.

It would be useless, and disagreeable, to dwell on several other arts, used in this second process, either to add to the strength of their genuine Wines, or to adulterate them, either by mixing them with Wines of a stronger kind, or with other ingredients that made them more durable, or gave them an artificial flavour. The *Greek* and *Roman* writers abound with receipts of this kind; among which, mixing a certain proportion of *Salt-water* with the Wine, has been more universally esteemed and used than any other, to depurate the Wine, and to preserve it. This discovery, it is said, was owing to a slave's having drank part of a cask of
Wine

Wine committed to his care, who, to conceal the fraud, filled it with sea-water; which afterwards was found to be superiour to the Wine of the same growth, contained in the other casks. However, we find that this art was more early known, and is mentioned by *Hippocrates*. The saline mixture certainly contributed to attenuate the viscosity of these strong Wines, to prevent their disposition to a putrid state, and to depurate them more freely from their lees, and were distinguished by the name of Οἶνον θαλασσαιμενον.

THE modern *Greek* Wines are frequently prepared in this manner; but their fine and delicate taste is often injured by it. * *Horace* distinguishes the superiour qualities of the genuine *Chian* Wine, from those which were mixed with salt-water.

THE *Romans* were less acquainted than the *Greeks* with the art of making and preparing either their genuine or adulterated Wines. *Cato*, who seems to be more fond of Wine, than delicate in his taste, gives a curious receipt for making with the *Faler-*

* Alcon Chium, maris expers. Lib. ii. Sat. viii.

nian an artificial *Chian* Wine, in which, among other ingredients, he regards *Sea Water* of such material consequence, that he directs it to be taken up at a great distance from the land, to be kept in casks for some time, until it was more depurated: But these are moderate adulterations, when compared to many others. * *Palladius* gives several particular forms, which were used by the *Greeks*, of improving the flavour, colour, and strength of their Wines, and to give to new Wine the qualities of old Wine. He mentions one so effectually useful to this purpose, that it was said to be communicated to the *Cretans* by the *Pythean* oracle; in which, among other ingredients, the *Hepatic Aloes* has a considerable share. *Pliny*, when he enumerates several kinds of adulteration practised in his time, with an honest indignation, exclaims, How can we then wonder if Wine, produced by such a variety of *Torture*, should rather possess the qualities of poison than of Wine?

THE two former processes regard chiefly such operations as were necessary to prepare these Wines, and to give them such a firm strength and *Trans-*

* Lib. xi. De Re Rustica.

parency, as made them fit to be received into other *Vessels*, and a different *Situation*, in which they remained until they gradually attained a proper maturity: These vessels were *different* from the others in which they had been previously prepared. The whole *Apparatus* of this last operation was in several circumstances very curious, and necessary to *preserve* and *improve* their genuine qualities; but as it has been delivered down to us in an obscure manner, I shall be more particular in describing it: For without knowing the *Procedure*, and intention of it, we can form no true judgment of these Wines, or of several passages in the Historians and Poets relating to them.

THE learned Dr. *Arbuthnot* observes*, that the *Romans* have given the proportions of their measures of *Length*, measures of capacity and weight, so exactly, that one being given, it is easy to determine the other two: Thus from the *Pes* being known, the *Congius* is determined, because the *Amphora*, which contained eight *Congii*, was the cube of the *Pes*, or *Foot*: The *Congius* itself being the

* Dissertations on the Ancient Coins, Measures, and Weights, p. 80.

cube of half a foot. From whence it is evident, the quantity of the *Amphora*, or *Congius*, being given, that the root or side must be so likewise.

THE *Amphora*, *Cadus*, and *Quadrantal*, are synonymous terms, and contained eighty *Roman* pounds. They were nearly equal in capacity to the * *Ἀμφορεύς*, *Κεραμιον*, and *Μεσηνης* of the *Greeks*. *Dioscorides* says, that the † *Κεραμιον* signifies the same vessel as the *Amphora*, but was called so, as being made of earthen ware; and that the *Μεσηνης* ‡ contained ten *Congii*: The *Urna* contained half the quantity of the *Amphora*, or forty *Roman* pounds: The *Sextarius* was the twenty-fourth of the *Urna*, and the sixth part of the *Congius*, from whence it had its name. Several vessels of a smaller size were made from subdivisions of the *Sextarius*, which were used in drinking their Wines, and will hereafter more properly come under our consideration.

* *Ἀμφορεύς* by *Syncope*, from *Ἀμφιόφρευς*. *Homer's Iliad*, lib. xxiii. ver. 92. *Odyss.* lib. ix. ver. 204.

† *Lib.* i.

‡ *Εστὶ δὲ μεσηνης χοῦς.* i. *De Vino Veratro.*

To this distribution given by *Volusius Mærianus*, a celebrated lawyer, the more ancient authors agree; and as a proof of the truth of these proportions *, Dr. *Arbuthnot* gives the following *Plebiscitum* of the two *Silii*, printed in *Greaves*, and seen in the best editions of *Sextus Pompeius de Fig. Verb.*

UTI QUADRANTAL. VINI. OCTOGINTA PONDO. SIET.

CONGIUS. VINI. DECEM. IS. SIET.

SEX. SEXTARII. CONGIUS. SIENT. VINI.

DUO. DE. QUINQUA. VICINTA. SEXTARII. QUADRANTAL. SIENT. VINI.

THE *Culeus* was the largest measure of capacity among the *Romans*, and contained twenty *Amphoræ*; and we read not only of *Culearia*, but of *Sesquiculearia*: Some were made of an inferior size than the *Culeus*, but larger than the *Amphora*, and had a more round and capacious belly. Such have been found of that form, and entire, after having been many years buried under ground, with two large handles, and were generally called *Diotæ*.

THE *Roman Amphora* was generally made of some fine earth, which was moulded, and artificially formed to its proper size and shape: It was

* P. 80.

afterwards

afterwards dried in the sun, and received its firm hardness from the fire. The † *Vatican Mount* was formerly famous for furnishing the best kind of earth for making these vessels, and continued so many centuries. The *Grecian Amphora* was made of a finer earth, and sold at a greater price ; on which account they were frequently brought to *Rome*, and their best Wines were chiefly preserved in them : Several vessels of an inferior size to the *Amphora* were made in the same form.

If these earthen vessels had been perfectly *vitri-fied* by a sufficient continued action of the fire, they would, without any farther preparation, have answered their intention in preserving their Wines : But as they were large, and liable to break, they only exposed them to such a degree of heat, as was necessary to harden them, and make them durable. These vessels being porous, and not sufficiently firm, it became necessary to *line* them *internally*, to prevent the Wine from penetrating through, or of contracting a *bad* taste from the vessel ; and afterwards *externally*, to keep out the *Air*.

† — Vaticanis condita musta cadis. MART. lib. i. Ep. 19.

THE *Amphora*, in which the best genuine and purest Wines were received, required the most simple *Apparatus*; as the intention was only to preserve them in their natural purity: To this purpose they generally applied *Wax* internally, and *Pitch* externally. *Pliny* condemns the wax, as being apt to give an acidity to the Wine; but this was prevented, by adding to it a proper proportion of *Mastic*, *Rosin*, and fine *Turpentine*. Various forms of these kinds are given by different Authors, particularly by *Cato*, *Columella**, and *Constantine Cæsar*; to some of which various aromatic ingredients were added, to give them an artificial flavour; and it was chiefly with a view to these *medicated Amphoræ*, that † *Horace* observes, they long retained the smell, with which they were first impregnated. The best *Amphoræ* were always thus prepared a year or two before they were used, and generally soon after they were taken out of the furnace, when they more strongly imbibed these ingredients; and by lying by so long, acquired more firmness, and became more free from the

* Lib. vii. De Agricultura.

† Quo semel est imbuta recens, servabit odorem
Testa diu—— Epist. lib. i. Epist. ii.

original taste of the ingredients: But as in that space of time they were apt to contract some impurities, they cleansed them well before they were used with *Salt* and *Water*, and afterwards *dried*, and *impregnated* them with the *Vapour*, or the dry *smoak* of *aromatic* gums, conveyed by a tube into the *Amphora*; and then kept the aperture, by which it was received, *closed* for some minutes, until the *Amphora* was sufficiently dried, and impregnated with this vapour: They *renewed* the external *Pitching*, where there was the least appearance of any *Crack* or opening, and then poured the Wine into it, and lastly applied to the superior aperture (into which the Wine was received) a *Cover*, which was generally called *Capitulum*, and by *Plautus*, *Operculum*. This was usually made of *Cork*, well defended with a preparation of *Pitch*, and exactly adapted to the aperture; and, for a farther security, that no air should penetrate, or any of the *spirituous* parts of the Wine evaporate, they poured an additional quantity of the same pitchy materials on this cover, which was marked with the *Age* of the Wine, and the *Year* of the *Consul*.

THE accounts which remain of some customs among the Ancients, appear now more obscure,
from

from being then so *universally known*, and requiring only a short description: But there is a peculiar obscurity in whatever relates to the *mechanic* part of any operation, and the *successive* times in which each was performed. The several parts of this process are mentioned by all the best authors; but unless they are viewed and considered distinctly, must appear very confused.

A REMARKABLE instance of this kind appears in an Ode of *Horace* *, where he describes the *Ceremony*, which was observed in opening the *Amphora* on that festal day, by disengaging it from its *Bonds* †, and giving liberty to the old Wine, which had been so long imprisoned in it: He then exactly *recounts*, but in an *inverted* order, the principal operations of this last process; the *removal* of the *pitched Capitulum*, made of *Cork*, which covered and *cemented* it; the *previous aromatic Vapour* of the gums with which it was *dried* and *impregnated*

* Hic dies, anno redeunte, festus
Corticem astrictum pice dimovebit
Amphoræ fumum bibere institutæ

Consule Tullo. Lib. iii. Od. 8.

† Chio solvete vincla cado. TIBUL. lib. ii. Eleg. I.

before

before the Wine was poured into it ; and, lastly, the *Æra* and name of the consul impressed on it.

THIS Ode has perplexed all the commentators who were unacquainted with the rules observed in this last process, and have applied the circumstances which relate only to the *Amphora*, to the Wine contained in it, with which they had not the least *Connexion* ; and have mistaken the *smoaky* taste, which the Wine *slowly* contracts from the *Fumarium*, in the second process, for this *aromatic* volatile vapour, which the *Amphora* quickly *imbibed*, and, as *Horace* plainly expresses, was *instituted* to receive it. This is evidently the true sense of this elegant ode, which likewise confirms the historical account given of this process. It would indeed be very absurd to imagine that *Horace* would ascribe to this fine old Wine, devoted to that festal day, the *smoaky* qualities for which their badly prepared, and adulterated Wines, were so universally censured and condemned.

FROM hence it is evident, that the Wine was never received into these *earthen* vessels, defended with *Pitch*, until the second process had been finished,

as it must have been *dissolved* by the repeated heats of the *Fumarium*, and become not only unnecessary, but prejudicial to the Wine.

BUT these previous rules for making and preserving these Wines, proved often ineffectual, from the badness of the Wine Cellar. The Ancients were fully sensible of this. From the remaining accounts of their *Cella Vinaria*, however imperfect, I shall endeavour to explain the design of it; and more particularly to shew, that the healthy state of all Wines entirely depends on a proper situation and construction of the *Wine Cellar*.

C H A P. V.

On the Wine Cellars of the Ancients.

AFTER the third process had been finished, the *Amphora* was conveyed to the *Cella Vinaria*, or Wine Cellar, which was *situated* and *constructed* in a very different manner from the *Apotheca* and the *Fumarium*. From the remaining accounts given of it by *Vitruvius* and others, it appears that they were minutely exact in directing several useful rules, to prevent the Wine from degenerating in that *Situation*.

As the future progress and state of the Wine greatly depends on the goodness of the Wine Cel-

lar, and as the best Wines are often lost for want of a due attention to it, I shall, from the preceding principles, and historical facts, endeavour to illustrate the rules given by the Ancients; and from thence to point out such improvements, as may more effectually contribute to the preservation of all Wines, and particularly of the light modern Wines, which are of more delicate texture than the strong Wines.

It is evident, that the Wine was never received into the *Amphora*, until it had been well depurated, and acquired a permanent transparency; and that it was then conveyed to the *Cella Vinaria*, with the sole intention of preserving and defending it from any other *Changes*, but what it gradually acquired in advancing to its proper maturity.

I HAVE in the first Chapter pointed out the principles of all Wines, and the physical causes which bring Wines to maturity and decay. * It is evident from the most accurate experiments and ob-

* Boerhaave Element. Chem. De Igne, tom. ii.

servations,

servations, with equal judgment deduced from them, that all alterations, not only in *fluid*, but *solid* bodies, are owing to a certain degree of *Motion* in their *Parts*, without which they must always remain in the *same* state, and unchanged. It is likewise thence evident, that this *constant* motion in all bodies is owing to the particles of *elementary Fire*, which are dispersed through every part of space, and intirely *pervade* them; and, that there is no *absolute Cold*, or total deprivation of motion, in the parts of even the most *solid* bodies; which therefore must in a length of time lose their *Texture* and firmness, and begin to decay.

It is the known property of *Fire* to rarify all bodies in proportion to their different *Densities*: *Fluids* therefore will be most susceptible of its influence; and as the degree of heat seldom perhaps continues *exactly* the *same* in any place, but perpetually varies, they must from thence be successively *rarified*, and *contracted*; but the effects of this varying motion in fluids will be likewise different, according to their different nature. Wine is a fluid, which consists of *different component* parts, whose cohesion, and progress to maturity, depends

depends on certain uniform degrees of motion, suitable to its strength, which will not *suddenly* destroy this *cohesion*, but is sufficient to throw off its superfluous saline, refine and exalt its oily and spirituous parts, and gradually bring it to its proper maturity, transparency, and flavour. But by this *continued progressive* motion, the *Union* and texture of its parts must unavoidably, at length, begin to *dissolve*, a *Sediment* to *subside*, and its *Colour* and *Flavour* to perish. Whenever Wine is reduced to this state, it may more justly be condemned, than *praised*, and distinguished by the character of *old Wine*: However, few Wines die of *old age*; but, by some *Accident*, or *Neglect*, perish before they arrive to their natural, final period.

HENCE it is evident, that the *Situation* and *Structure* of a Wine Cellar, ought to be such, as will most effectually defend the Wine from the frequent *Variations* of the external air, adjacent fires, and the *Agitation* of carriages, and to preserve an *equal* degree of heat; though some variations must be unavoidable.

WHAT

WHAT degree of heat is best suited to different Wines, can only be determined by experience and observation. But in general the *lighter* Wines require a more cold and temperate situation than the *strong* Wines; and what may gradually advance these to their maturity, may *excite* a new Fermentation in the former, which is generally fatal to them: A *Defect* of a proper degree of heat will be likewise prejudicial; and *sudden* cold and *Frosts* are no less destructive to them, than greater heats. It seems therefore evident, that the degree of heat in every Wine Cellar ought to be preserved above that of *thirty-two* in *Farenheit's Thermometer*, which is the beginning *freezing* point; and perhaps, *not much to exceed* thirty-six (especially in the light Wines), * under which no vegetable juices are susceptible of Fermentation. This intermediate just degree can only be *determined* by the *Thermometer*; for though the heat of the cellar is preserved nearly uniform, it will affect *human Bodies* with a greater sense of *Cold* in *Summer*, and of *Warmth* in *Winter*.

* Frigus nimium omnem omnino Fermentationem prohibet namque infra trigenta sex gradus caloris ultra vix progreditur. BOERHAAVE Hist. Ferment. tom. i. p. 187.

HENCE

HENCE it is evident, that though different degrees of *Heat* were necessary in the first process of Fermentation to bring vegetable juices to a *vinous State*, and often in the second process, to give the Wine a more firm strength and transparency ; yet that more moderate and equal degrees of heat are necessary to preserve it in that state, and advance it to a *gradual* maturity.

HENCE it is evident, that Wine, in a less degree of heat, but equally and justly suited to the nature of it, will more *slowly* but *safely* advance to maturity, and be more durable, than in a greater, though equally uniform heat.

HENCE likewise it is evident, that the same rules which were often proper to prepare and depurate different Wines, must be *prejudicial* or *fatal* to them, if pursued after they are fit to be received into the Wine Cellar. This is equally true in respect to *strong*, or *light* Wines, or whether they have been received into the *Amphora* or *Bottles*, as they can only advance to a gradual maturity, by a moderate uniform heat : This way of reasoning seems to be confirmed by experience, especially in
light .

light Wines: The finest *Burgundy* and *Champaign* Wines are frequently apt to turn *ropy* in the flasks, and lose their transparency and flavour, which are restored and preserved by covering them with *Snow*, and afterwards removing them to a more equal and cold situation: For sudden, or continued heats, *relax* the texture of those Wines, and afterwards render them *ropy* and languid; when a just degree of cold *strenghtens*, and maintains their natural vibrations.

* It was usual among the Ancients to bury some of their light and delicate Wines, in wooden casks, pitched externally; in which situation they were more safely preserved, and defended from the unequal changes of the external air, than in common Wine Cellars: † Stronger Wines likewise have been often found buried in a larger kind of *Amphora*, which after many years have been found free from decay. ‡ *Sieur Lucas* mentions a very remark-

* Circa Alpes ubi terræ meliores sunt temperie ligneis vasis Vina condunt, eaque infodiunt terræ toti. PLIN. Hist. Nat. lib. xiv.

† Talia adhuc extra mœnia urbis cruta vidimus. BAC. lib. i. cap. viii.

‡ Travels to the Levant.

L

able

able instance of this kind, which he saw in *Candia*, where, in levelling some ground, and digging for the foundation of a house, two casks of Wine were discovered in a deep vault, which retained a grateful, generous taste, though it was supposed to be near a hundred years since any buildings had been erected in that place. *Baccius* mentions that some of the *Spanish* Wines were in great estimation at *Rome* in his time, and were exported in large quantities to different countries, on account of their superior qualities. * Their usual method of preserving them, after they had been well depurated, was to bury them under ground, in earthen vessels, for two or three years, and afterwards to dig up every year as many as they expected a demand for; which they immediately removed to their cold vaults. The coldest was always preferred to any other, in which the Wine gradually acquired more strength, and such a delicate fragrancy, that even the smell of it quickly revived the spirits; and taken in a moderate quantity, was particularly use-

* Communiter ad biennium vel triennium, ea condunt subter terram, in vasis tictilibus, erogantque annuatim; quæ cellis asservata, præsertim frigidis, evadunt robustiora: Utilia etiam ægris et imbecillis, sapore, vel solo odore. *Bacc. Hist. Vin. lib. vii.*

ful to sick persons in a low and languid state. He adds, that it was an usual custom among them to dig up a cask, on the birth, or marriage of one of their children; or to celebrate any fortunate event to the family.

THE fine *Canary* Wines, were formerly imported annually into *Great Britain*, and *Ireland*, in large quantities, on their *Lees*, and in their genuine simplicity. It was then usual to drink them for a few days in that turbid state; on account of their delicate flavour, and grateful pungency: but when *fined* down, were particularly esteemed for their racy taste, and permanent qualities.

THESE Wines for some years have been very seldom imported, and probably never in their genuine state, but are mixed with other Wines of an inferiour growth, to enhance their value. The Ancients we find mixed, and *forced* most of their strong Wines (except those which they called *inspissated*) into an *early* maturity: The modern Artists pursue the same intention, but with less judgment. By this *shorter* process, they have more quick returns of profit from the sale of these Wines;

but their original flavour and fragrancy must unavoidably perish by these *unequal beats* and *agitations*, and though after this forced progress to maturity a grateful flavour remains, yet it is very different from that taste and fragrancy, which they would have retained, if, after being well made, they had in their more recent, and genuine state been preserved by being buried under ground, or kept in proper cold vaults. Neither can any artificial flavour, which these artists are capable of giving to them, be equally grateful or salutary, as that which is genuine, and peculiar to different Wines; nor any age of *Maturity*, equal to that which they naturally will attain in their *middle* stage, long before they grow old. This is confirmed by * *Columella* and † *Pliny* elegantly observes, that all fine Wines have a flavour of a delicate, mild nature, which is *peculiar* to each of them; but by him, and others ‡, has not improperly been dis-

* Quæcunque Vini nota sine condimento valeat perennari, optimam esse eam censemus, nec omnino quicquid immiscendum, quo naturalis sapor infusetur. Lib. xii. cap. 19.

† Sua cuique vino, saliva innocentissima, sua cuique ætas gratissima, quæ est media. Hist. Nat. lib. xxiii. cap. 1.

‡ ——— et methymnæi Græca saliva vini.

PROPERT. lib. iv. El. 9.

tinguished by the name of *Saliva* ; from the greater impresson which the light volatile parts of the Wine makes on the tongue, when they are longer retained there by the *Saliva*. * *Persus* applies this expression to eatables.

THIS singular flavour, and fragrancy, prevails in several bodies, but more particularly in those of the vegetable kind : It resides in their finest oily parts, which chiefly contain their principal qualities and virtues : these are more light and delicate in some than in others. They exhale from many by the temperate heat of the air, and are soon dissipated by the greater continued heat of the Sun : They are quickly raised from some, by a light distillation, and communicate their virtues to the *Water* : on the surface of which they rise, when kept in a cold, quiet situation, and are thence easily collected. They are of a more heavy, and permanent nature in others, and are separated from them by different processes : But though they are generally called *essential* oils, yet their virtues depend on the very minute, and most subtilized part

* ——— Turdorum nosce salivam.

Sat. vi.

of them, which by the best Chemists is called the *Spiritus Rector*; for if they are exposed to the air, it gradually exhales and perishes, while the oil remains insipid, and inodorous.

WINE is a vegetable production, which has various qualities. Different Wines are principally distinguished by the quantity of *ardent* spirits, which prevails in them: The other refined, and volatile parts, which lightly reside in the more delicate and recent Wines, and longer in the rich, fragrant, and stronger kind, possess peculiar superior qualities, which delight, and animate in a very different, and more agreeable manner, than those of the *spirituous* kind; but must be entirely lost and exhale whenever the Wine by artificial heats is forced into an early maturity, or is deprived of its genuine flavour.

WE find from the accounts which remain of the Wine Cellars of the Ancients, that they were very exact and judicious in the construction and situation of them. * *Vitruvius* directs that they

* Lib. vii.

should

should have a northern aspect; that the doors and windows should be placed in the same direction; that these last should be small, and seldom opened, and then rather with a view of *renewing*, than *altering* the temper of the air.

SEVERAL useful rules are given by the best writers on this subject, to defend them from *external*, and *internal* injuries, that the places adjacent to them should be free from dunghills, or any objects that may render the air less pure; that the cellars should be occasionally cleansed, and guarded against the effects of stagnating, moist exhalations, which are apt to infect the walls, and roof of them, and communicate a bad taste to the Wine. This *Mucor*, or musty taste, was a common disease, to which the finest Wines were most liable; and several directions are given by them not only to prevent, but to cure it.

SINCE the Ancients have been so exact in these general rules, there can be no doubt but the cellars of persons of distinction were constructed with particular care. It evidently appears that they consisted of several extended vaults, of different dimensions,

mentions, which had a communication by doors, occasionally opened. * This is confirmed by many fragments relating to them. The cellars of *Hortensius* must have been very extensive, as we find he bequeathed to his heirs ten thousand *Cadi* of Wine, or according to our computation four hundred and ten tons. It is likewise most probable, that their most valuable and old Wines were kept in the most distant, *interior* cellars. † *Horace* seems particularly to point this *Situation, Variety, and extent* of their Wine Cellars.

WE often meet with the names of other repositories, in which they kept their Wines, particularly

* Nec minori cura vitandum est ambientis acris tam æstus, quam algores, et unde nullum Vina possint concipere odorem mucidum, ex situ Cella Vinariæ et parietum. *CONSTR. De Agricul. lib. vii.* Cellæ Vinaria semota procul esse debet a balneis furno sterquilinio, reliquisque immunditiis tetrum odorem spirantibus, nec minus a cisternis, aquis salientibus, ex quibus qui extrahitur humor, vinum corrumpit. *COLUMEL. lib. i. c. 6.*

† Si possitis intus Chii veterisque Falerni
Mille Cadis.

Serm. lib. ii. Sat. 3.

Seu te in remoto gramine per dies
Festos reclinatum bearis
Interiore notâ Falerni.

Lib. ii. Carm. 3.

Absumet heres Cæcuba dignior
Servata centum-clavibus.

Carm. lib. ii. 14.

the

the *Apothecæ* and *Horrei*. * *Columella* justly distinguishes them. The former were distinct parts in the *Fumarium*, in which they were kept, until they were sufficiently prepared to be placed in the *Cella Vinaria*; the *Horrei* were public warehouses, in which their casks, or *Amphoræ* of Wine, were lodged for immediate sale.

FROM these rules of the Ancients, and the principles laid down, I shall point out some defects in our modern Wine Cellars, and in what manner our Wines may be more effectually preserved in them.

THE size of the Cellar ought to be in proportion to the quantity of Wine for which it is designed; as it is more easy to defend a small Cellar from the admission of a greater quantity of the external air, and to renew it occasionally, than one of a larger size.

THE situation ought to be low and dry, therefore not on any great declivity, where the under

* Lib. i. cap. 6.

currents from the superiour ground must always keep it moist, and infect the air with its putrid exhalations: This communication however may be prevented by intermediate trenches.

A SMALL *Anticellar*, built before all large Cellars, would be a considerable defence, and improvement to them; in which a quantity of Wine sufficient for a few days, may be kept, and the necessity prevented of more frequently opening the large Cellar, and admitting the external air; which must always in some degree alter the temperature of it, and in sudden, or continued great heats, or frosts, may be particularly injurious to the Wine.

It is usual to cover the Bottles in the *Bings* with *Saw-Dust*; to which I should prefer dry *Sand*, whose *Density* is much greater. I saw a remarkable instance of the benefit arising from an intermediate defence of this kind. A hoghead of Claret, which had been lately bottled, was heaped up in a corner of a merchant's common large Cellar, with a view of removing it soon to the Wine Cellar. In the mean time, a load of *Salt*, from the want of a more convenient place, was thrown

on the bottles, and remained there several months before it was removed. This Wine was afterwards found to be much superior to the Wine of the same growth, which had been imported and bottled about the same time, and had been immediately placed in the Wine Cellar. The large quantity of salt formed a compact vault over the bottles, which entirely defended the Wine from the influence of the air, though greatly exposed to it; and probably the *Coldness* of the salt contributed to this improvement.

THE Ancients certainly more effectually preserved their Wine in larger earthen vessels pitched externally than we can in our bottles, as they are more capable, from their superior *Density* and *Capacity*, of resisting the frequent changes in the air; and it is a common observation, that the Wine received into bottles which contain two quarts, proves better than that which had been kept in single quarts.

It appears to me very probable, that our best modern Wines, especially those of a delicate texture, and flavour, may be more effectually pre-

served in earthen vessels, of a larger size than our bottles, well glazed externally, and internally. The vessels of this kind, which were formerly used for that purpose, were pitched externally, and lined internally, on account of their being *porous*, and imperfectly *vitri-fied*; but our artists are arrived to such a perfection in this article of manufactory, that their glazed vessels are impervious to the air, and incapable of communicating any bad taste to any liquors contained in them; however pitching them externally would be a greater defence, especially when the glazing is not equally firm.

THE largest vessel in which the *Greeks* and *Romans* usually kept their Wine in the vaults, was the *Amphora*, which contained ten gallons, or eighty *Roman* pounds. The *Urna* contained half that quantity. Several others were used of an inferior size, and gradually decreasing in the same proportion. * They sometimes varied from this general rule, and made them of a finer earth, ornamented with different figures.

* Vide Fig. in the Frontispiece.

THE form and capacity of these vessels is well known, and seems well adapted to the intention of them. They were regularly ranged in the Cellar; and as their capacity gradually decreased to the bottom, whenever any *Lees* had subsided there, on removing the vessel they were less apt to rise and mix with the Wine, than when contained in bottles; the surface at the bottom being so much greater in them, and the quantity of Wine which they contain so much less. The Wine was drawn from them by a *Syphon*, and the opening at the upper part so large that they were easily cleansed; and the size of the cork, well pitched, was a more effectual defence than our small corks.

IN such habitations, where no vaults have been made, or can be conveniently constructed, an artificial Wine Cellar may be easily contrived, which may perhaps more effectually preserve the Wine from the variations of the external air, than the common vaults, which are liable to many defects. These may be prevented, by burying these earthen vessels in *Cavities* made in the ground, exactly adapted to the size and form of them, which may be lined with *Brick*, or *Slate*; and so deep, that
the

the upper part of the vessels lodged in them, should be, at least, a foot and a half lower than the surface of the ground: The intermediate space might be filled up with dry sand, over which a leaden *Cover* may be placed, to mark the size of the vessel, and the time when it was buried there.

I AM sensible that this plan, which I have only sketched out in a superficial view, is very imperfect, and capable of many improvements, in respect to the form, and capacity of the vessels, and the materials of which they are composed. The form and size of the *Amphora* may be a proper one, when a great quantity of Wine is deposited in large Cellars. A hoghead of Wine may be received into ten vessels, each of which contains somewhat more than two dozen of our quarts; neither would twenty of half their capacity take up any considerable space in a vault, or when buried under ground in any convenient ground-floor. Whenever any vessel is taken up for use, it may be suspended on the side of the Cellar or anti-cellar, and the quantity of Wine, which is occasionally wanted, drawn off by a *Syphon*. It was usual to pour a small quantity of oil over the Wine, especially when the
pitched

pitched cork was removed, and it was designed for immediate use; which spreading over its surface, preserved it equally fresh, during the time of drinking it.

THESE vessels would be less expensive, and more durable than bottles, and less liable to frequent frauds, and a considerable waste of the Wine, when decanted from bottles, in which a sediment had subsided. But these considerations are of another kind: My intention is only to preserve the Wine in a more healthy and firm state.

C H A P. VI.

Of the inspissated Wines.

THESE Wines have been much praised by some, and censured by others. Many passages in the Historians and Poets relating to them are doubtful; and the best accounts hitherto given of them are not only imperfect, but often obscure. The subject therefore requires and deserves a more particular attention to extricate it from these difficulties, and to explain the genuine nature of these celebrated Wines, which have been distinguished, or rather *censured*, by the name of *inspissated* Wines.

It

It is evident from the former history, that the Wines of the Ancients were originally made and prepared in their genuine simplicity. These of the lighter kind, were the common drink of the inhabitants of the country in which they were annually made and consumed : The stronger Wines, were more capable of being prepared for a longer time, and were chiefly used in their chearful and convivial meetings. The number of Vineyards cultivated, was in a general proportion to their exigencies, and the demands made for them ; yet even in those rude times some particular Vineyards were cultivated with more than usual care ; and from their selected grapes, Wines of a superior, and more permanent kind, were made for particular uses, and chiefly for the tables of Princes.

THE *Asiatics* were early remarkable for their Wines. The *Greeks* acquired the knowledge of their rules, and by their superior genius and industry greatly improved them. Their Wines were not exported to *Italy*, till a greater degree of affluence and luxury began to prevail among the *Romans*. These long neglected the improvement of their own Wines, and were more intent on extend-

ing their conquests, than encouraging the finer arts. As the demands for their Wines, and the price of them greatly encreased, the *Greeks* soon departed from their usual simplicity in preparing them, and by a more easy and shorter process, forced them into more early maturity, and exported much larger quantities. From this *Æra* the Character of the *Grecian* Wines began to decline; few Wines were exported genuine, and they then began to apply themselves more to the arts of adulterating, than of improving them. In some time they became so exquisitely skilful in these frauds, that they not only imitated the Wine of any particular growth, but of any particular age.

IN this degenerated state of these Wines, some among the *Greeks* endeavoured to recover their reputation and declining commerce; and by a new particular *Process*, made a more firm kind of Wine, which not only exceeded all their former Wines in its generous qualities, but was more durable: But this Wine was of that peculiar nature, that after its state of maturity, as it advanced in age, it acquired a greater degree of *Consistence*. This seems to be the true origin and nature of these celebrated Wines,

Wines, which in their *Decay* were called inspissated.

It was a prevailing custom among the *Asiatics* and *Greeks*, and thence derived to the *Romans*, to destroy their enemies, and often themselves, by *Poison*. Several preparations of this kind were made with such exquisite art, and different degrees of activity and strength, as to be quickly, or more slowly fatal. The physicians with equal care endeavoured to discover such *specific Antidotes*, as were capable of counteracting the operation of these poisons. These *Antidotes* were generally prepared, by infusing their *medicated* ingredients in the best and most *generous* Wines, which, by being heated over the *Fire*, gradually acquired a firm consistence; and from this inspissation, and their antiseptic quality, become *durable*, and retained their virtues entire for many years.

THE permanent quality which these Wines received from the encreased consistence of them, may be illustrated, and in some measure explained, from the History of Fermentation. * *Boerhaave*

* Calor nimius qui nonaginta gradus excedit, dissipat potius actuosâ principia fermentabilium, quam ut eadem excitet, et promoveat:

has evidently shewn, that a certain degree of *Fluidity* in the materials, is necessary to make them capable of Fermentation, and that even the *Mustum*, or recently pressed juice of the grapes, which is most susceptible of it, will by inspissation become incapable of it, and continue durable in that state many years, if kept in an equal and temperate situation.

WE however find that these Wines were made by a very different process from that which was used in making the common strong Wines. The former were made from grapes, which, after they had arrived to a full maturity, remained suspended on their branches for a few days, and exposed to the sun, until they became more dry, and their juices more rich and consistent: The *common strong* Wines were made from grapes immediately pressed after they had attained a full maturity, and were likewise brought to a more perfect vinous state, by

moveat: unde ipsa fortis exhalatio majore caloris gradu peracta, inspissat fluida in densitatem fermentationi prorsus ineptam: Coctio autem id celerius efficit; ita ut succus uvarum optimus, celeri coctione amittit omnem ad fermentationem aptitudinem, maneatque deinceps massa per annos quietissima nec mutata. Hist. Ferment. tom. i. p. 187.

a stronger

a stronger *original* Fermentation, and afterwards forced into a more *early* maturity in the *Fumarium*; but these Wines, by *mild* and *equal* degrees of heat, were *slowly* advanced to a more permanent maturity.

THE description given of the *Roman Fumarium* by *Columella*, was of a plain construction. It is mentioned by him among other convenient articles, necessary in every country farm-house. This was very different from the *Grecian Fumarium*, in which large quantities of Wines, or those of the most delicate kind were prepared, in which no expence was spared, by more equal degrees of a purer heat, to advance them to a more gradual maturity.

THIS intention we likewise find was sometimes promoted by exposing these Wines to the air, and vibrations of the sun, for some time during the summer solstice, by which means they were more easily depurated, and any smoaky tincture which might have been contracted, was entirely dissipated.

THE common strong Wines of *Greece* and *Italy* were likewise exposed to the sun and air to bring them to a more early maturity ; and the *Madeira*, and other Wines of the *Spanish* islands, by an operation of the same kind, and being agitated by long voyages in a warm climate, acquire a more quick and grateful maturity. But these changes were produced by more unequal and greater degrees of heat. All Wines are made on the same general principles, but in a different manner. Several other rich Wines were likewise made from grapes suspended on their branches, and exposed to the sun, after they had attained their full maturity. * *Statius* beautifully describes them in that situation. But these Wines were made by a *light* Fermentation, soon attained a grateful strength, and maturity, and were never designed to be *durable*.

THE common *Greek* and *Italian* Wines had been always apt to grow foul in the *Amphora*, though transparent when first received into it. This was so common, that they were generally obliged to *strain* them before they were brought to the

* *Mirantur nemora et rorantes sole racemos.*

table. Two different kind of *Strainers* were chiefly used for this purpose; the *Colus nivarius*, and the *Saccus linarius*. The former was a sort of pumice-stone, somewhat excavated, into which they previously put *Snow* or *Ice* to cool the Wine, while the foul parts were separated from it. The former was always preferred to the latter, which was apt to give a disagreeable taste to the Wine, though both were censured for weakening the Wine. *Plutarch*, with a peculiar energy of expression, calls such Wines enervated and effeminated. They had likewise a purer kind of *Silver* strainers perforated with very small holes: Several of this kind are described among the other antique vases found at *Herculaneum*.

THE obscurity relating to these Wines has been more encreased, by not making a distinction between them, and others of an inferior and more weak kind, which were often prepared by previously exhaling the aqueous and lighter parts of the *Mustum* by *Cottion*; and during the Fermentation they impregnated them with *Pitch*, and other aromatic ingredients.

By this adulteration they acquired more strength and flavour, but soon degenerated to an inspissated state. *Pliny* compares them to unguents, and says they rather deserve the name of medicated poisons than Wines. There was another kind of inspissation early used, and recommended by physicians; the *Passum Sapa*, Εψήμα, or *Defrutum*, which were *Extracts* of the recent inspissated juices of the best grapes, and differed chiefly in their degree of consistence: Some were subastringent, but generally of a cooling attenuating nature: Others were made from inspissation of the *Mustum*, which, though not properly vinous, acquired some weak qualities of that kind, if any light Fermentation had preceded. With this the women were allowed to dilute their aqueous liquors, when by the severity of their laws they were denied the use of Wine. Such preparations, with some aromatic ingredients made into a more firm consistence, are made by the modern *Turks*, which they frequently carry with them on long journeys, and occasionally take as a strengthening and reviving cordial.

BUT though the accounts which remain of these Wines are imperfect, and often more perplexed by some modern writers, yet we can with certainty determine several circumstances relating to the manner in which they were made, and the peculiar qualities which distinguished them from other Wines. * These *Baccius* enumerates in a rude, but expressive style: " That they were never forced into an early maturity by being exposed to the *Fire*, or by great and *unequal* heats in the *Fumarium*; that they were originally made from the *best Grapes*, which had been suspended on their branches a few days after their full maturity, not to dry them, but to give them a more generous consistence, and that they were gradually advanced to maturity by continued, or varied degrees of a milder and purer heat, which *exalted*, and not *wasted* their spirituous parts, until at length they acquired a depurated, limpid, equally digested, and permanent maturity.

* Vinum autem diversum, ac in diverso ab illis fiebat apparatu, haud quidem igne adhibito, et quæ præ nimia suffitione medicata fierent, sed quod uvis, per aliquot dies semipassis, moxque calcatis, ac in doliis super fumo, diu, humidioribus partibus ac spiritu digestum, æquabili substantia, limpidum diu servaretur. Lib. iii. cap. 3.

IN a subsequent chapter I shall more fully explain in what manner the *Greeks* and *Romans* prepared all their strong and rich Wines, by previously diluting them with a certain proportion of warm water, and afterwards cooling them in snow. This was more necessary, when their Wines had acquired any degree of inspissation by age *. *Baccius* farther adds, who can doubt that these Wines, in this attenuated, and beautifully transparent state, far exceeded any of the modern *Greek* Wines †?

WHAT degree of consistence these Wines acquired in their state of maturity is not easy to determine certainly. *Baccius* thinks it did not exceed that of the rich *Malvasian* Wine made then in *Candia*; nor do we find that these celebrated Wines were ever in their just maturity called inspissated, but were stigmatized with that name, when they

* Diluit annosum Martia lymphæ merum. TIB. EL. ix.

† Cui dubium, quin adhibita aqua, vel quæ essent crassiora, per aquam calidam dissoluta, mox quæ per frigidam refrigerata, ac splendido nitore aureo, attenuata biberent, super omne Græcum, et *Malvasiam*? Id genus erant vina, tunc temporis generosa, ac usu communissimo, in tantum (*Athenæo*, *Galeno*, et *Plinio* attestantibus) ut homo Romanus, vix alio potu uteretur, nisi vinorum ejusmodi generibus. Ibid.

degenerated

degenerated into that state : Nor was the manner of making these Wines by this improved process (which was in time more universally known) confined to any *particular* growth ; but the best *Greek* Wines, the *Chian*, *Lesbian*, *Coan*, &c. were equally prepared in the same manner ; and we have reason to think that the same process was more generally used, and in preparing some of the best and most generous *Italian* Wines. * *Cato* is the first among the *Romans*, who has given a process, by which the *Falernian* Wine may be prepared in such a manner, as to acquire the qualities of the *Greek Coan* Wine, and which, he says, required four years to bring it to its perfect vinous state. In this we find that sea-water was a *material* ingredient, which he directs to be taken up at a great distance from the shore, and kept for a considerable time in wooden casks, till it was quite depurated : This probably greatly contributed to preserve it from degenerating into a foul and vapid state.

FROM hence we may begin to form a more clear judgment of the nature of these Wines, which

* De Re Rust. cap. cxii.

was more *simple* than has been generally imagined, and chiefly differed from their former *Greek* Wines, by being prepared with more art and judgment. But as they were so much esteemed by persons of the best taste in that elegant and refined age, they must have possessed some singular qualities superior to those of the same growth, which had been formerly made by the usual process. Their singular excellence seems to consist in their being more durable in this firm transparent state; for the best *Greek* and *Italian* Wines were apt to grow foul in the *Amphora*, and lose their colour and *Transparency*; which are not only grateful to the eye, but whenever they are wanting, the *Union* of their component parts begins to dissolve, and in the same degree their strength and flavour to decay.

WE find therefore that these Wines always retained their original names, as there was no real difference between them and the former Wines of the same growth, but that which they acquired from their superior qualities, by which they were easily *distinguished*; but as these Wines were justly censured and marked, by being called *inspissated*, when in that degenerated state, it is not improbable

bable that they were likewise sometimes distinguished by some characteristic expression, when they were in their best and most perfect state, which either may have been lost, or the meaning of it, though then clear, and universally understood, after so many centuries may appear now very obscure. This perhaps may be illustrated from a remarkable passage in an * Ode of *Horace*. *L. Corvinus Messala*, who was probably the *Rex Convivii* on that festal day, when *Horace* entertained his friends, orders some of the *Languidiora Vina* to be drawn, and brought in. † It was an usual custom in their convivial entertainments to drink the lighter Wines in the beginning, and afterwards the stronger and more generous Wines. It cannot therefore be supposed that the Wine he called for

* O nata mecum Consule Mânlio,
 Seu tu querelas, five geris jocos,
 Seu rixam et insanos amores,
 Seu facilem pia testa, somnum :
 Quocumque lectum nomine Massicum
 Servas, moveri digna bono die ;
 Descende, Corvino jubente
 Promere languidiora Vina.

Ode xxi. lib. 3.

† Capaciores affer huc, puer, Scyphos,
 Et Chia Vina aut Lesbica. HOR. Epod. lib. v. Od. 9.

in that social hour was distinguished by that name, either for its want of strength, or of a grateful flavour; nor can I recollect that among the various epithets with which the Historians and Poets have distinguished the different qualities of Wines, that of *Languidum* has been used, except in this single instance. It seems therefore not improbable, that *Horace*, who had a peculiar happiness of expression, intended to point out the singular quality, or degree of consistence, which these Wines attained in their perfect state; and in another Ode, by a similar expression, he seems to mark its progress to that state †; but except in these instances, he always distinguishes the different qualities of other Wines, by their usual epithets, *generosum*, *lene*, *leve*, *dulce*, *molle*, &c ‡. It is likewise remarkable, and seems to add a greater force to the observation, that *Corvinus* does not call for *Languida*, but *Languidiora Vina*, which if

† Nec Læstrigonia Bacchus in Amphora
Languescit mihi. Lib. iii. Od. 16.

‡ Ad mare cum veni, *generosum* et *lene* requiro. Lib. i. Ep. 15.

—— Sapiens finire memento
Tristitiam, vitæque labores
Molli, Plance, mero. Lib. i. Od. 7.

taken

taken in a literal sense, expresses a Wine of an inferior and less animating kind, and certainly could not deserve that *sublime Invocation* to the *Amphora*, to descend like a deity, and inspire them with its various *magic* and *latent* powers; but this expression very properly distinguishes it from the same Wine, which when too recent had not acquired its peculiar degree of consistence, or when in a more advanced age became more inspissated, and had lost its softness and flavour. It seems therefore to be particularly adapted to the singular quality of this fine old Wine, which, though received into the *Amphora*, when *Manlius* was *Consul*, still retained all the advantages which it could acquire from age, without being injured by it; for it appears to be sufficiently *fluid* to be drawn from the *Amphora*, and when diluted with a proper proportion of hot water, and afterwards cooled in snow, must have possessed the limpid generous qualities which *Baccius*, and others, have ascribed to them.

THIS Ode took its rise from a supper given by *Horace* to *Messala*, and a select number of his friends, which seems to have been attended with
several

several agreeable circumstances; to which, perhaps, the *Amphora*, introduced on this occasion, had particularly contributed. This he celebrates, by pointing out the various powers of the Wine contained in it, and the different passions it is capable of exciting in the human mind, and inscribes this elegant performance to his illustrious friend, as a perpetual monument of his esteem and affection, which must have given him a superior delight to what he could have received from the most exquisite Wine.

It is necessary here to observe, that it was usual with *Horace* and others, who had not a large store of different Wines, to supply themselves, on any festal entertainment, with an *Amphora* of Wine from the public warehouses *, or *Horrei*, which were plentifully furnished with a variety of them, of different ages, or growths, and were chiefly exported from *Greece*. These foreign Wines were greatly esteemed at *Rome* in those times; some of

* Quo Chium pretio cadum
Mercemur. Lib. iii. Od. 19.

Parcis deripere Horreo
Cessantem Bibuli Consulis Amphoram. Lib. iii. Od. 28.

them

them were genuine, and of the best growths. The greatest part of them were adulterated; but prepared with such exquisite art, that they nearly resembled the different age and qualities of the former; and even these were then preferred to the best genuine *Italian Wines*. *Martial* takes particular notice of this prevailing prejudice *.

PERHAPS I have refined too much on this singular passage; but as *Horace* had certainly on this occasion a just right to assign to this Wine any superior qualities, it is not improbable that he might have had in view those which were made by this improved process, and which were then so universally esteemed. Neither is it material, whether the historical circumstances in this Ode, relating to the age of the *Amphora*, and Wine, or the particular growth and qualities of it be exactly true; and this indeed he particularly points out, by saying it is indifferent from whatever growth it came †.

THIS seems to have been the true intention of *Horace* in writing this moral and beautiful Ode,

* Accepit ætatem quisquis ab igne cæcus

Nec facili pretio, sed quo contenta Falerni

Testa sit, aut cellis Setia cara suis, Lib. x. Ep. 36.

† Quocumque lectum nomine.

P

which

which he has executed with a more than usual poetic spirit: In some parts of it, his flights are rapid and sublime, and from thence they gradually descend with dignity, when he describes the various benefits which flow from the moderate and prudent use of it. He was habitually temperate; his muse was often inspired, but never inebriated with Wine; and in another Ode*, when he seems transported to a degree of enthusiasm with the powers of Wine, and its creation of new ideas, he suddenly checks the pleasing, but dangerous progress of them †.

THE best commentators have been more than usually perplexed about the interpretation of several passages in this Ode. Doctor † *Bentley* differs from most of them, and ridicules their cold and

* Quo me, Bacche, rapis tui

Plenum? Quæ in nemora aut quos agor in specus,
Velox mente novâ? Lib. iii. Od. 25.

† ——— Dulce periculum est.

O Lenæ, sequi Deum

Cingentem viridi tempora pampino. Ibid.

‡ Utinam vero ipsi suas chartulas corrigere vellent, neque tam frigidas excusationes Horatio commodare: Certe non placuerunt celeberrimo Dacierio: Sed et ipse suo acumine ludum risumque præbet, cum prius de Amphora intrepreatur, posterius de Vino: — Quanto meliora protulit *Acron Scholiastes* (Quocumque nomine), ex omnibus supradictis sive ad jocos, sive ad querelas, &c. aut enim hæc est sententia aut nulla est: Fateor tamen exempla hæc non

trifling observations, and seems with a partial severity to censure *Dacier*. He seems to agree more with *Acron*, than any other, in referring *Quocumque Nomine* to the variety of passions, which the *Massic* Wine is capable of exciting ; but candidly owns, that neither this, nor any other interpretation, comes up to the true spirit of *Horace*. However, this is quite foreign to the intention of *Horace*, by which, as I hinted before, he evidently intends only to express the generous origin of that Wine, without regarding its peculiar name, or the place from which it was produced. The obscurity of this passage, and the wrong application of it, was owing to their not having known that the names of the principal Wines, and of various growths, were often changed, and promiscuously used, especially by the Poets, and that the *Massicum* was more frequently used, to express all the different Wines of the *Campania Felix*, and the circumjacent hills, than those of the *Massic* hill. This and the *Cæcubum* were often used in a general sense. * *Horace* in another place mentions the lat-

non ex omni parte similia esse verbis Horatii : Neque quicquam legisse memini, quod ad amissum iis respondeat.

* Abstinet hæres Cæcuba dignior

Servata centum clavibus.

Lib. ii. Od. 14.

ter,

ter, to express an extensive Wine-Cellar, furnished with a variety of the best Wines. All other difficulties vanish when they are viewed in this clear light. Nor could any *Epithet* be more properly given to the *Tessa*, than that of *Pia*, whenever the Wine contained in it, is capable (among those various irregular passions) of producing undisturbed sleep, and an oblivion of all cares.

BUT among the various absurd interpretations, which have been given to some passages in this Ode, none is more eminently absurd than that by *Cruquius*, (quoted by Doctor *Francis*) given to the *divine Descent* of the *Amphora*, who says it alludes to a custom of the *Romans*, who had their Wine-Cellars at the top of their houses, that their Wines might ripen sooner by the smoke.

IT is not my intention by these observations to claim any critical merit, or to censure persons of distinguished learning, for mistaking such passages, which, from the nature of them, must appear obscure to those, who have employed their time to more useful purposes, than enquiring into the minute circumstances, which relate to the Wines of the Ancients.

C H A P. VII.

*Of the principal Wines of the Campania Fælix,
and other Parts of Italy.*

MANY authors differ about the extent and situation of the ancient *Campania*, as several parts of *Italy* were called by that *Name*; but the distinction of *Fælix* was added to this, on account of the superior fertility of its soil, and the qualities of its various productions. * *L. Florus* describes it, as being not only the most beautiful

* Omnium non modo Italia, sed toto orbe terrarum pulcherrima Campania plaga est. Nihil mollius cælo: Denique bis floribus vernat. Nihil uberius solo; ideo et Liberi Cereisque certamen dicitur. Nihil hospitalius mari. L. FLOR. lib. i. cap. 16.

part of *Italy*, but of the whole globe; and the peculiar distinction which he seems to give to *Capua*, the seat of his nativity, as being near the sea, more properly belongs in this respect, and in many others, to the *Ager Falernus*.

* *Pliny* agrees with † *Strabo* and the best geographers, in fixing the western limits of the *Campania Felix* from the bay of *Sinuessa*, which was the extreme city of *Latium*, and gives a more distinct account than any other of its situation, and various Wines; though the distance of many centuries, and different appearance, must unavoidably render some parts obscure. He describes the progress of the hills immediately rising from this bay, and the beautiful Vines which adorn them; and with a *peculiar Elegance* of expression praises the *Temulentia Nobilis*, and the peculiar qualities of these Wines. He likewise points out the progressive course of the circumjacent hills, with their

* Hinc Felix illa Campania est. Ab hoc Sinu [Sinuessæ] incipiunt vineferi colles et *Temulentia Nobilis* succo per omnes terras inclyto, atque ut veteres dixerunt summum Liberi patris, et Cereris: Hinc Setini et Cæcubi protenduntur agri, his junguntur Falerni, Caleni, dein confurgunt Maffici Gaurani Surrentinique montes. Lib. iii. cap. 5. sect. ix.

† Γεωγραφικὴν βιβλ. viii.

intermediate

intermediate plains, extended to various distances, but which he has confined within more narrow limits than have been assigned by others to the ancient *Campania*. However, all agree in the large extent of the *Ager Falernus*, of which *Horace* takes particular notice *.

AMONG the various hills of the *Campania Fœlix*, these of the *Ager Falernus* have been particularly distinguished on account of their compass, and the superior qualities of its Vines. Several geographers have, to little purpose, differed about the limits and number of its hills. *Pliny* gives a description of only those principal hills peculiarly belonging to it, the *Gaurus*, which is the highest, the *Faustianus* in the middle, and the *Falernus*, which is the lowest; while others have included within its compass the *Calenus Formia*, and those of the adjacent hills. The original names of these hills in the course of time were changed, and others, which were synonymous, given to them: the *Gaurus* was called *Massicus*; and all these hills, with the different Wines produced from them,

* Arat Falerni mille fundi jugera; HOR. Ep. iv. v. 13.

were frequently included in the general denomination of *Massic* or *Falernian*.

THESE different names and descriptions have perplexed several modern writers ; but whoever is curious enough to read the Dissertations of the learned *Camillus Peregrinus* on this subject, will find all these difficulties removed, and fully explained. It will be sufficient to my purpose to mention * two paragraphs, in one of which he

* Dixerunt quidam veterum, Falernum esse montem : Inter eos Martial,

Nec in Falerno monte major Autumnus. Lib. xii. Ep. 57.

Idem affirmavit Servius ad Virgil, lib. ii. Georg. hisce verbis, Falernus mons est Campaniæ, in quo optima Vina nascuntur ; nihilominus ex Livio, Polybio, Plinio secundo aliisque intelligimus Falernum fuisse *Agrum*, sed qui satis potuit (ut hujus vocabuli vis est, interpretantibus grammaticis) etiam comprehendisse *montem* quendam : Verum ab aliis *mons* ille qui in agro Falerni fuit, nomine magis speciali dictus fuit *Massicus*, qui apud multos authores satis est celebris ; ita *Vibius* sequester *Massicus* Campaniæ, in Falerno : Et meâ quidem sententiâ prudenter loquutus est ille.

Certe utrumque nomen fuit unius, ejusdemque montis unde per eorum promiscuam usurpationem, Columella, lib. iii. cap. 8. *Massicum* appellavit non ipsum montem, quem hoc nomine, germana proprietate Cicero appellavit in *Agraria* ii. *Quantulum inter est, utrum in Massici radices, an in Italiam, aliove deducamini*. Neque dubium est, Massici Surrentinique et Albani, atque Cæcubi agri vites, omnium quæ terra sustinet in nobilitate Vini principes esse. Dissert. 2. de Campania Fælici apud Græv. Thesaur. Antiq. Roman. tom. ix. Pars 2.

produces

produces many instances of these various denominations, and the other more fully to prove, that the names of *Massic* and *Falernian* were promiscuously used to express the same Wine. He observes, that *Columella*, when he enumerates the principal Wines of *Italy*, mentions only the *Massicum Surrentinum*, the *Albanum*, and the *Cæcubum*; and as he gives the first place to the *Massic* Wine, it is very evident that by that name he includes all the Wines of the *Ager Falernus*, which by all authors were always allowed to be supereminent.

THE Wines produced from these hills, which originally were distinguished by their particular names, were often equally ranged among others, which were more distant, as possessing the same general qualities. Neither were they always in the same estimation; but from several accidents successively lost and gained a character. * *Pliny* says that the *Vinum Surrentum* was formerly

* *Surrentinum veteres probaverunt, sequens ætas Albanum et Falernum: Secunda nobilitas erat Faustiano; exolefcet hoc quoque copiae magis, quam bonitati studentium: Gauranas scio a Falerno agro degenerantes, vocantur Falernæ, ubique fere quam in Gauro.*
Lib. xiv.

preferred to any other of the *Campania Felix*, and by the succeeding age the *Albanum* and *Falernum*: That the *Fauſtianum* had loſt its former preference by a neglect of the culture of its Vines and Grapes, and regarding more the quantity than the quality of the Wine produced from them: That the *Falernian* Wines, on account of their ſuperior qualities, were often tranſplanted to other hills, and the Wines were thence called *Falernian*; but from the difference of the ſoil generally degenerated.

HENCE theſe Wines are often promiſcuouſly mentioned, or particularly diſtinguiſhed by the Hiſtorians; while the * Poets with more freedom ranged different Wines in the ſame claſs. But though all the different Wines of the *Campania Felix* have been in the courſe of time variously diſtinguiſhed, yet thoſe of the *Mons Falernus* always preſerved a ſuperior character. † *Tibullus*

* Cæcubum, et prælo domitam Caleno

Tu bibes uvam. Mea nec Falernæ

Temperant vites, neque Formiani

Pocula colles.

HOR. lib. i. Ode xx.

† Non tibi, ſi pretium Campania terra daretur

Non tibi, ſi Bacchi cura Falernus ager.

EL. ix.

makes.

makes them the peculiar care of *Bacchus*. * *Silius Italicus* gives them a particular preference to the best *Asiatic* or *Greek Wines*; and † *Virgil*, when he bestows singular praises on the *Vinum Rhaeticum*, says, it must however yield to the *Falernian*.

THE superior qualities of the Wines of the *Mons Falernus* seem to be owing to the peculiar happiness of its soil, impregnated with *Sulphur*, and to its situation favourably exposed to the *Sea Breezes*, which supplied a due proportion of *Heat* and *Moisture*. It is very remarkable, that a *light Cloud* was frequently suspended over this hill, which in other situations has been always considered to be particularly prejudicial to Vines; but ‡ *Virgil*, with a philosophic sagacity, and poetic spirit, explains these different effects. This “was not a

* ————— ex illo tempore dives

Tmolus et ambrosiis Arvisia pocula succis

Ac Methymna ferax, Latius cessere Falernis.

SIL. ITAL. Lib. vii.

† ——— et quo te carmine dicam

Rhaetica? Nec cellis ideo contendere Falernis.

Georg. Lib. ii.

‡ Quæ tenuem exhalat *nebulam*, fumosque volucres,

Et bibit humorem, et cum vult, ex se ipsa remittit.

Georg. Lib. ii.

heavy moist Vapour, but a finer *Atmosphere*, raised from its own rich bosom, which lightly hovered on it, and was successively *absorbed* and *renewed*."

PLINY mentions three different kind of Wines produced from the *Mons Falernus*; the one of a rough strong kind, another of a sweet and milder, and a third which was light and weaker. This light Wine is particularly taken notice of by *Athenæus* and by * *Galen*, who observe, that its qualities were quite opposite to the others of the strong kind; but the principal *Falernian* so universally celebrated, was that of the *rough strong* kind.

ATHENÆUS, who gives a particular account of the principal Wines of *Italy*, and is to be considered as the best interpreter of *Galen's* sentiments on this subject, says it was fit for drinking from ten to fifteen and twenty years, but was then more apt to affect the head. † *Pliny*, and the best physicians agree, that the *Falernian*, and all the strong Wines, were most salutary and fit for drinking at

* Lib. i. cap. iii. De Antidot.

† Nec in novitate, nec in nimia velustate, corpori salubre est: Media ætas optima. Hist. Nat. lib. xxiii. cap. i.

their

their middle age, as the new Wines were crude and apt to ferment, and the old to become sharp, and lose that grateful strength and flavour, which they had acquired in a just state of maturity.

* *Cicero* elegantly applies this medical precept to the style and manner of the ancient and modern orators, and probably took the metaphor from *Aristophanes*, who in the same manner distinguishes the Poets.

THE ancient writers, and particularly the Poets, were apt to exaggerate the age and virtues of old Wines. There have been well attested instances of Wines continuing permanent in a grateful state to an almost incredible age; but these are very un-

* *Thucydides* rerum gestarum pronuntiatione severus, et grandis etiam fuit: Hoc forense concertatorium judiciale non tractavit genus: Orationes autem quas interposuit (multæ enim sunt) eas ego laudare soleo: imitari neque possim, si velim; neque velim fortasse, si possim, ut, si quis Falerno Vino delectaretur, sed eo nec ita novo, ut proximis consulibus natum velit; nec rursus ita vetere, ut *Opinium*, aut *Anicianum Consulem* quærat. Atqui eæ notæ sunt optimæ. Credo: sed nimia vetustas nec habet eam; quam quærimus suavitatem, nec est jam sane tolerabilis. Num igitur qui hoc sentiat, si is potare velit, de dolio sibi hauriendum putet? Minime: sed quandam sequatur ætatem. Sic ego istis censuerim et novam istam quasi demusto ac lacu *fervidam* orationem, fugiendam; nec illam præclaram *Thucydidi* nimis veterem, tanquam *Anicianam* notam, prosequendam. In *Bruto*.

common.;

common; and some peculiar circumstances must have then concurred, either such a favourable season as prevailed when *Opimius* was consul, or when they have remained in very deep vaults in an *equal medium*, entirely free from the least agitation, and not liable to any influence of the external air. *Cicero*, at an entertainment given by *Damaspippus*, was pressed by him to drink some of his *Falernian Wine*, which he particularly recommended for being forty years old. After having only lightly tasted it, he replied, *Bene ætatem fert*. This, however, shewed more politeness to his host, than approbation of his Wine. A compliment of this kind is often agreeably made to an old man; and though his appearance might be better than could be expected, does not imply that he had either the *Health* or *Powers* which attended the middle age of his life.

THE *Falernian Wine* was certainly more firm and durable than any of the *Italian Wines*, and on that account is distinguished by * *Martial*; but

* Addere quid cessas, puer, immortale Falernum.

Lib. ix. Ep. 95.

very few, except from vanity or curiosity, kept their Wines beyond their usual age of maturity. We may form a better judgment of the extent of the Vineyards of the *Campania* from the account which * *Cicero* gives of the constant and large revenue received from the duties of these Wines, and from that which † *Baccius* gives of them in his time.

‡ *Ruellius* mentions a remarkable quality of these Wines being all of an amber colour, and that other productions of these hills, and particularly the pears, though really of a bad kind, were more esteemed for the resemblance they bore to the beautiful colour of these Wines; and this seems to be more confirmed by § *Martial*.

* In *Agraria*, ii.

† *Quorum* computet qui volet, quanto hi sunt census, ac Vinorum ingens distributio ex annuis publicanorum Romæ pensionibus :: Vestigialium nam Vinorum ad Hostiam ac ripam Romanam a tribus ab hinc annis 1593, quibus hæc scribimus quinquaginta mill. ductorum pendent census ex vectura jumentorum de Campaniæ Vinis. De Italia Vinis, l. v. p. 215.

‡ Summa laus Falernis a Vini colore dictis molli fulgore perspicuis. De Succino.

§ Condantur parco fusca Falerna vitro. L. ii. Ep. 40.

THE

THE circumjacent and extended hills of the *Campania Felix* abounded with Vineyards, from which various kinds of Wines were produced, and particularly some of the light and generous, which were much esteemed; I shall only take notice of a few, which were chiefly celebrated for their particular qualities.

THE hills of *Pausilipo* (which extended from every side of the promontory of that name) were not more remarkable for the excellence of their Wines than their happy situation: The proximity of the sea, the purity of the air, and particularly the celebrated waters of *Baia*, made them the favourite retreat of the principal persons of *Rome*, who adorned them with elegant *Villas*, and a variety of fine gardens. All these circumstances conspired to render *Pausilipo* the seat of health and pleasure. *Athenæus* observes, that the name of *Pausilipo* was probably derived from *απο παυσιας* (της) *λυπης*, its peculiar influence in banishing all cares and sollicitude from the mind. * *Pliny* describes the singular and grateful qualities of these

* Hist. Nat. lib. xiv.

Wines, and adds, that they neither wanted any adulteration, or would admit of it, without being easily discovered by any alteration of their genuine taste. * *Pliny* praises the genuine lightness, and grateful fragrantcy of these Wines, and their mild animating qualities, without affecting the head ; on which account they were particularly recommended by the physicians to valetudinarians, and those of a delicate constitution. † *Sophocles*, in a singular instance, joins the name of *Jupiter* to the Wine of *Pausilipo*, as the first glass taken in convivial entertainments, was usually sacred to *Jupiter the Preserver*, and probably added that eminent mark of distinction to those Wines, as they equally contributed to *Health* and *Pleasure*.

THE *Vinum Surrentinum*, though formerly esteemed equally with the *Falernian*, had for a long time lost its character, and, as *Athenæus* observes, had regained it in the time of *Augustus* : He commends it as being light and generous, without *Heating*, and therefore most proper for vale-

* Ζευ Παυσιλυπε και Διῳ σωτηριω σποιδη τριτα κρατηθε. Sophoc. in Nauplio.

* Vinum hoc sincerum, odoratum, sapidum, in maximus calidus stomacho gratum, nec renibus, nec stomacho infestum, nec caput feriens. Hist. Nat. cap. xiv.

tudinarians. *Pliny* and *Galen* praise it on the same account, and for being so durable, that it was often used in preparing their antidotes, and mixed with other strong Wines to preserve them ; and this was probably owing to its prevailing antiseptic quality, which guarded them from a vapid putrid disposition. It was therefore on these accounts much recommended by physicians, though *Tiberius Cæsar* said that had they not dignified it with the title of *Nobile Vinum*, it would only be regarded as a generous Vinegar, and *Caius Cæsar* used to call it *Nobilis Vappa* ; but as it abounded with tartar, like the best *Rhenish* Wines, it required a considerable time to separate the grosser parts, and when it attained a proper maturity, was justly esteemed for these singular qualities.

THE *Hills* which were most remarkable, after those of the *Campania Fælix*, for producing the best *Italian* Wines, were those of *Tybur* and *Tusculum*, which rise in view to the east of *Rome*. The *Setinum* and *Albanum* were extended to a greater distance, with others variously interspersed. They were early celebrated for their fertility, and successively planted with Vineyards, especially on their declivities, which were favourably exposed to the aspect

aspect of the *Sun*, and the influence of the *Sea Breezes* *. From these circumstances, and the dryness of their soil, the Wines produced from them, both of the strong and light kind, were celebrated for their eminent qualities; even the light Wines acquired a permanent strength and flavour. † *Horace* praises that soil for being more friendly to the Vine than any other. *Athenæus* confirms this character of their light Wines, and particularly the *Albanian*, which are produced from these hills. He distinguishes two different kinds of *Tyburine* Wines, one of which was light, and the other strong, and that even the former was durable to several years. He likewise mentions two *Albanian* Wines of different strength, which were so much esteemed, that the Vines were often transplanted to other places, and even to the *Campania Felix*, where, on an hill near *Cumæ*, an excellent Wine, of a light and generous kind was made, and thence called *Albanium*.

* Cras bibet Albanis aliquid de montibus, aut de
Setinis, cujus patriam, titulumque senectus
Delevit multa veteris fuligine testæ.

Juv. Sat. v. Lib. i. ver. 33.

† Nullam, Vare, sacra vite prius severis arborem
Circa mite solum Tiburis, et mœnia Catili.

Lib. i. Od. 18.

THE *Vinum Setinum* was particularly esteemed for its light, grateful, and permanent qualities: and * *Pliny*, among other praises which he bestows on it, says it was the favourite Wine of *Augustus*; nor is it improbable that this is the Wine so much recommended by *St. Paul* to *Titus*, for strengthening the stomach; as these Vineyards were but at a small distance from the *Appii Forum*, and the ruins of the tavern, where he first met his friends from *Rome*, are still remaining, and have been often mentioned by late travellers. And such was the peculiar happiness of the soil, and situation of these hills, that even the declivities of the † cold *Prænestæ* were cultivated and adorned with Vines, which produced light and generous Wine, not inferior to those of *Tybur*.

THE beautiful situation of these hills, the purity of the air, the prospect of the sea, and convenient distance from *Rome*, made them, in the early time of the *Commonwealth*, the agreeable retreat of the

* *Vinum Setinum Divus Augustus prætulit omnibus aliis.*

† Πραίνισινα και Τιβουρίνα λιπαρώτερον κρασικον του Οινου. Athen. l. iii. cap. 9.

Quique altum Prænestæ colunt. VIRG.

principal

principal persons of that city; but after the wars had ceased, and *Augustus* had restored peace to the empire, learning and all the useful and polite arts began to flourish, and quickly made a surprising progress. They were successively adorned with magnificent villas, buildings, and gardens; *Cicero* had there his *Tusculan* villa, where he often retired, and probably composed several of his Orations, and particularly his *Tusculan* Questions. The villa of *Lentulus*, though very elegant, was still more remarkable for the fine library which he had collected; but the villa of *Mæcenas* was supereminent for its extent and magnificence, where he past the greater part of his time, and preferred this delightful retreat to all the honours which *Augustus* pressed him to share with him, in the government of the empire, and to which *Augustus* often repaired, when fatigued with public cares, during the life of *Mæcenas*, who bequeathed it to him at his death. Some antiquarians mistaking the true meaning of some passages in *Horace**,

* ——— ego, apis Matinæ

More modôque

Grata carpentis thyma per laborem

Plurimum, circa nemus uvidique

Tiburis ripas, operosa parvus

Carmina fingo. Lib. iv. Od. 2.

in which he praises his situation at *Tusculum*, have supposed that he had a villa there; and have not many years since pretended to point out the remaining ruins of it; but this was undoubtedly some particular apartment in this extended villa of *Mæcenas*, which was solely assigned to *Horace*, and not improbably called by his name, and more effectually answered the intention of *Mæcenas*, who delighted in his society, than any more distant villa of his own could have done, where he could neither have enjoyed the easy affluence, or extended gardens, groves, retired walks, which he there describes, and where it is very probable he composed this, and some of his best Odes, after the civil wars had ceased. It is not therefore surprizing, that, delighted with this situation, and not then possessing or expecting any villa of his own, he should ardently wish that it might be his calm, and happy retreat in his old age *.

THE *Sabine* lands, which were divided from these hills by the river *Anio*, were likewise distinguished

* Tibur Argæo positum colono
 Sit meæ fedes utinam senectæ :
 Sit modus lassæ maris, et viarum,
 Militiæque. L. ii. Od. 6.

for their fertility, and the generous and light qualities of their Wines. * *Strabo* gives an exact description of their limits, circuit, and extent, even to the *Appenine* hills. He says the *whole* region chiefly consisted of mountains, with rising hills and vallies, which were plentifully supplied with rivers, passing through them, that the soil was very fertile, and particularly favourable to the *Vines* and *Olive* trees.

HORACE had here his real villa, or rather his *Estate*, which he often gratefully acknowledges to have received from the generous bounty of *Mæcenas*, and that it was not only sufficient to supply him with whatever was necessary and convenient, but even to make him rich. † When he writes to *Quintus*, who probably had rallied him on the revenues

* Ἀπασα δὲ αὐτῶν ἡ γῆ διαφερόντως εἰλαιόφυτος ἔστι καὶ ἀμπελοφύτος.
Geo. l. v.

† Ne percuncteris, fundus meus optime *Quincti*,
Arvo, pascat herum, an baccis opulentet olivæ,
Pomifera et pratis, an amictâ vitibus ulmo;
Scribetur tibi forma loquaciter, et situs agri.
Continui montes, nisi dissocientur opacâ
Valle, sed ut veniens dextrum latus aspiciat Sol,
Lævum discedens curru fugiente vaporet.
Temperiem laudes. Quid, si rubicunda benignè

Cornæ

of his estate, he declines giving him a particular account of his Vines supported with elms, his meadows, fruits, olives, and abundant grain, which enriched the owner, and chuses rather to sketch out a general description of it (which exactly agrees with that which *Strabo* has given of that country), that it was among an almost continued range of mountains, with interspersed vallies, and the purest waters running through them, with a favourable aspect to the sun on their declivities, and with *extended* olive-groves, and woods of *Oak*. He particularly mentions his own Vineyards among the productions of his farm; and as the whole country abounded with them, it is probable that a considerable part of his revenues proceeded from these Wines. He seems to have taken more than usual care of some particular Vines, undoubtedly designed

Corna vepres et pruna ferant? Si quercus et ilex
 Multâ fruge pecus, multâ dominum juvet umbrâ?
 Dicas adductum propius frondere Tarentum.
 Fons etiam rivo dare nomen idoneus, ut nec
 Frigidior Thracem, nec purior ambiat Hebrus,
 Infirmo capiti fuit utilis, utilis alvo.
 Hæ latebræ dulces, etiam (si credis) amœnæ,
 Incolumem tibi me præstant Septembribus horis.

Epist. l. i. Ep. 16.

for

for his use, as he says he often pruned them with his own hands. This was the *Sabine* Wine, which he tells *Mæcenas* he had prepared for his drinking, when he had accepted his invitation, and yet calls it *Vile*; which by those who are unacquainted with the spirit and style of *Horace*, has been interpreted in a *literal* sense as cheap and weak; but this was only a modest recommendation and distinction given to his own *Sabine* Wine, when he compared it with the best Wines of *Greece* and *Italy*, with which *Mæcenas*'s tables were daily supplied *. The *Sabine* Wines, like those of other hills, differed in their strength; but the best kind of them were esteemed by the physicians for their light and generous qualities; and † *Galen* particularly distinguishes it by the name of *Nobile Vinum* (ευγενη Σαβινῶ) and in another place says it arrived to its true maturity in six years ‡. This is con-

- * Vile potabis modicis Sabinum
 Cantharis, Græca quod ego ipse testa
 Conditum levi, datus in theatro
 Cum tibi plausus. Lib. i. Od. 20.

† Mith. Med. Lib. vii. cap. 6.

‡ Ο Σαβινῶ κυφώλερ ἀπο εἰνὼν ἐπὶ ἡ ἐπὶ ἡδονῆς.

Cæcubum, et prælo domitam Caleno

Tu bibes uvam: mea nec Falernæ

Temperant vites, neque Formiani

Pocula colles. Ib. Od. 20.

S

firmed

firmed by what *Horace* says of his *Sabine* Wine in another Ode †, where he recommends the the *free* use of it, as being light; and from its generous strength, as sufficient to warm and animate them in that severe cold season. It is likewise evident that the *Sabine* Wine, which he there recommends, was sincere and pure, and of the durable kind, as it was kept in the *Diota*, or wooden cask, in which the light pure Wines were generally preserved, and was then more than four years old, yet had not then been received into the *Amphora*; in which state we find this *Sabine* Wine, which was designed for the use of *Mæcenas*: Nor was the *Amphora* of the common *Roman* kind, but of the *Grecian*, in which they chiefly kept their best Wines; and to shew that he had taken more than usual care in preserving it, he adds, that he pitched it again with his own hands, before it was conveyed to the cellar. It is very remarkable that *Horace* curiously points out every minute circumstance which he thinks may recommend this Wine to *Mæcenas*. He observes.

† ——— atque benignius
Deprome quadrimum Sabina,
O Thaliarche, merum diota.

Lib. i. Od. 9.

likewise,

likewise, that this last apparatus was finished on the day he had received a public applause in the theatre, on his recovery from a dangerous distemper. This was an elegant compliment to his illustrious friend ; for it was usual to mark the pitched cork with the age of the Wine, and the name of the consul of that year ; but he chose to date it from a more memorable and grateful æra. The true spirit and intention of this Ode, and the qualities of the *Sabine* Wine, when justly viewed in this light, will appear very different from that cold and obscure interpretation, which has been usually given to it.

PLINY too credulously reports, or exaggerates, three particular circumstances relating to *Mæcenas*, that he had a continual fever, that he never slept for three years, and that he first introduced the custom in *Rome* of eating asses, which on that account were sold at a greater price, but that this custom soon declined after his death.

THIS extraordinary anecdote is to be ranked with many others of the same kind, which *Pliny* has too credulously reported or exaggerated ; nor is it

necessary to observe, that it is impossible for any man to live three years without sleeping, and in a continual fever. - It was well known that *Mæcenas* had a delicate, hectic constitution. * *Velleius Paterculus* has given a very exact account of his life, and particularly mentions that he was a bad sleeper, but often had refreshing sleep, and in his intervals of health, especially after a better night of rest than usual, he was remarkably chearful and active. I make no doubt that *Horace* in thus particularly describing to him the peculiar care with which the *Amphora* of *Sabine* Wine was prepared and preserved for him, knew that his physicians had recommended these lighter Wines to him, which were certainly more suitable to his constitution, and more grateful to him than the strong and rich Wines. It is not improbable that *Mæcenas* revived at *Rome* the custom of eating the flesh of asses; nor was his taste for this food singular; for that of young asses had been frequently recommended by the physicians as a light aliment, and was by some preferred to venison for its delicate taste; and *Pliny* in another place mentions it as being particularly useful in tabid cases.

* Fragment. Lib. ii.

C H A P. VII.

Of the principal Greek and Asiatic Wines.

GREECE abounded more than *Italy* with a variety of light and strong Wines; the soil and climate were more friendly to the Vines; they were cultivated with more care, and the Wines were made with more art and judgment. We have early accounts in *Homer* *, that they drank all their Wines, especially those of the stronger kind, very largely diluted with water, for their common drink; but in their convivial meetings they reduced them to a more salutary, though ge-

* Οἱ μὲν αἰνοῦσι πρῶτον ἐν κρητῆσι καὶ ὕδαρ. Odyf. i.

nerous degree of strength. We find that they had some general rules for mixing their strong Wines, from which however they frequently varied. They kept recent Wines, which were designed for more immediate use, in goat-skins, *ασκῶ ἐναιγείῳ* *; but even in his time, they were well acquainted with the art of preserving their best and stronger Wines in wooden casks, or hogshheads, which he calls *πίθοι*, until they arrived to a proper maturity. With such *old* Wine, we find that the † cellars of *Ulysses* were plentifully supplied, and that the Wine which ‡ *Nestor* drank was eleven years old.

THE *Pramnian* and *Maronean* Wines are particularly celebrated by *Homer* for their superiour strength. § He says, that the latter required twenty parts of water to dilute it to a proper degree. This must appear very absurd to those who are not acquainted with the manner of diluting their common Wines very largely, when they drank

* Il. iii. Odyf. vi.

† Εὐ δὲ πίθοι οἶνοι πάλαια ἡδύποταιο
ἔσαν. Odyf. ii.

‡ Το οἶνε ἡδύποταιο τοῦ ἐνδὲκατῷ ἐνιαυτῷ ἰζὲ ταμῖη. Ibid.

§ Odyf. ix.

them

them with an intention of quenching their thirst; and among the different cooling drinks which *Hippocrates* enumerates as being most proper, he particularly mentions * twenty parts of water, and one of *Thasian* Wine. In these circumstances the Wine was added only to correct the crudity, and inactivity of the water, and to make it pass more freely into the blood. The *Maronean* Wine was never drank in the manner described by *Homer*, with a view of strengthening or exhilarating the spirits; for if a rectified spirit was drawn from that Wine, and diluted with that proportion of water, it would be weaker than any pure Wine of the lightest kind; but when drank reduced to its proper *Standard* as Wine, he then calls it *ἡδύ, ποτὸν θεῖον*. This seems to be confirmed from *Pliny* †, who gives the best history of the *Maronean* Wine, which he received from *Mutianus*, who had been in that country for some time, and says,

* Lib. ii. de Morb. in fine.

† Vīno antiquissimo claritas Maroneo est in Thraciæ maritimæ parte genito, cui ut auctor est *Homerus* vices tantum additur aquæ mensura: duratque ejus vis in eadem terra geniti, vigorque indomitus in præsens: quippe cum *Mutianus* nuperrime proderet, sextarios singulos octonis aquæ misceri in eo tractu ipse comperit. Lib. xiv. cap. 4.

that

that this foil and Wine still preserved its former vigour, and that it was then usual with the inhabitants to mix eight parts of water with one of Wine, to reduce it to a proper vinous strength.

THE *Pramnian*, equally with the *Maronean*, was distinguished for its strength *. *Athenæus* says that it derived its name from a rocky mountain on the island *Icaria*; that it was remarkably austere while recent, but gradually mellowed and became more grateful, as it advanced to maturity; on which account *Aristophanes* compares the style of the ancient and modern *Greek* poets of his time to the rough, but improving qualities of the *Pramnian* Wines; and says, that the *Athenians* neither approved of that which was smooth, without strength, or disagreeably rough; but of that which was like the *Pramnian* Wine, which, while recent, contracts the eye-brows and forehead into wrinkles, and is disagreeable and slow in its passage through

* For when Achilles entertained the ambassadors, he not only called for larger cups, but for Wine of a more generous mixture, not a different stronger Wine.

Μειζονα δὲ χρηττονα Μενιστρεν νικ καλιστα
 Ζωροτερον δὲ νεκραισε, δεπας δὲ ευτυνον εκασω. Il. ix.

the

the body; but when arrived to a just maturity acquires a generous strength, and a *nectarean*, diffusive spirit and fragrancy.

AMONG the *Greek Wines*, those of the islands of the *Archipelago* were most celebrated. We may form a better judgment of them in the flourishing times of *Greece*, by comparing them with the account * *Baccius* gives of the state of them about two hundred years ago, and which he received from persons of undoubted knowlege and candour, who had long resided in the island of *Candia*. This island then belonged to the *Venetians*, under whose government the natives and strangers were tempted to reside, from the encouragement given to their industry, in cultivating their Vineyards, and making their Wines, which were then in such

* Hi populi felicissime degunt sub inclyto Venetiarum dominio et undique exercent studium Vinearum, ac exquisitum Vinorum cultum, tanto proventu, ac copia, ut certum sit ex annuo vectigalium censu reipublicæ Venetiarum centum mill. ducatorum (dictum mirum) ad ducenta millia vel amplius dolia Vini quotannis e Crætæ portibus, in diversas Europæ partes conveyi: Nec in Italia solum, ac Venetias sed in Hispania adnavigata, in Galliam, in extremam Britanniam et magnam Germaniam advecta, regnum Crætæ vel his duntaxat vectigalibus reddunt opulentissimum. Hist. Vin. lib. vii.

estimation, and exported in such quantities to several distant parts of *Europe*, that the duties arising annually from them to the republic, amounted from a hundred to two hundred thousand ducats.

He says, that in the general they observe the same rules, in making and preserving these different Wines, which were delivered down to them from the ancients; that they often suspended their grapes on the Vines, after they had attained a full maturity, and sprinkled them with *Gypsum*, to give more firmness and consistence to their juices. Some of these were more distinguished for their strength and fragrancy: Such were the *Thasian*, and such some of the *Cretan* Wines, which *Athenæus* calls οἶνος ἀνθοσμίας, from their fragrancy resembling that of the finest flowers.

THIS island of *Candia*, anciently called *Crete*, was formerly not less celebrated for its number * of cities, than for its fertility, and the superiour qualities of its Wines, owing to the peculiar felicity

* Εὐκροῖα πόλις, HOM. Odyf. xiv.

city of the soil, the favourable aspect of the sun on the declivities of its various hills and mountains, and the influence of the sea-breezes; on which account the Vines, which were thence transplanted into other islands, soon degenerated.

* THE *Chian* Wine was however longer and more universally esteemed than the *Cretan*, or that of any other of these islands; and particularly that Wine which was produced from a mountain called *Arivisia*.

† PLINY enumerates the various other islands, from whence different excellent Wines were produced, but all inferior to the *Chian*; and it is observable, that the Wines in the general are more valuable, in proportion as the situation of the island is *higher*, and enjoys a more open aspect to the sun

* Χαρῖστερ δὲ ἐστὶν ὁ Χῖος καὶ τὰ Χίῳ ὁ καλυμμένος

Ἀγιστιος. ATHE. Depnos. i.

Ambrosiis, Arivisia pocula succis. SIL. ITAL. Sylv. Lib. vii.

Vina novum fundam calathis Arivisia nectar. VIRG. Georg. ii.

† Vinum Coum, Cyprium, Naxum, Lesbium, Pfyticum, Methymneum. Lib. xxiii. cap. 4.

and sea-breezes; and we find that the most celebrated *Italian*, *Greek*, and *Asiatic* Wines, were made in such situations, and in a convenient proximity to the sea.

AMONG these the *Lesbian* is particularly celebrated * for its mild, grateful, and generous qualities, and not affecting the head, though drank more freely; and *Athenæus* illustrates the character he gives it, by a remarkable story of *Aristotle*, whose pupils observing his declining state of health, asked him, which of the two candidates, *Theophrastus* of *Lesbos*, or *Menedemus* of *Rhodes*, he would recommend to succeed him in the philosophic school? He then ordered some *Lesbian* and *Rhodian* Wine to be brought to him, and having tasted and examined both for some time with great attention, he said they were both good; but that (ἡδίων οὐ Λεσβέου) the *Lesbian* was most agreeable.

FROM this account of the fertility of these islands, and the excellent qualities of the Wines made

* Hic innocentis pocula Lesbii

Duces sub umbra.

HOR. Lib. i. Od. 17.

there,

there, we may form some judgment of the ancient state of the *Asiatic* Wines. This wide extended country, in which the finer arts, and agriculture, had particularly flourished, since it has fallen under the dominion of the *Turk*, is reduced in most places to a wild desert; but though by the precepts of their *Alcoran*, the culture of the Vine has been chiefly neglected, yet such is the happy nature of that soil, *nullo cultu ferax*, that the traces of their former celebrated Wines are still found in those, which are made from their uncultivated Vines.

* Two illustrious travellers, who have published their observations on the present state of *Asia Minor*, with an accuracy not usually found in such books, have given some remarkable instances of this kind. In their journey from *Ephesus*, they give a curious description of a prospect they enjoyed, of a successive course of hills and mountains extending from thence, and of a beautiful valley at the bottom of them, through which the

* Ægidius Van Egmont, envoy from the States, to the king of Naples, and John Heyman, professor of the Oriental languages in the university of Leyden. Travels, Vol. II.

river *Cayster* flowed, and emptied itself into the sea. Among these, the lofty *Tmolus* rises eminent above the rest; but more distinguished for the excellence of its Wines; nor was the *Cayster* less celebrated by the Poets * for its serpentine *Meanders*, than for the *Swans* which adorned it, which were so numerous, that *Ovid* calls the swan the *Bird of Cayster* †. At the bottom of the extreme mountain near the sea, several magnificent ruins still remain to be seen of *Sardis*, the metropolis of *Lydia*. The description given of these places, and of the *Pactolus* winding its course through these ruins to the sea, very nearly agrees with that given by ‡ *Pliny*.

* ——— non illo plura Caystros.

Carmina cygnorum, labentibus audit in undes.

OVID. *Metam.* Lib. v.

Sic niger in ripis, errat cum forte Caystri

Inter lædeos, ridetur corvus olores— MART. Lib. i. Ep. 54.

† Utque jacens ripa deslere Caystrius ales

Dicitur ore suam deficiente necem. OV. *Trist.* El. 4.

‡ Lydia autem perfusa flexuosi amnis Mæandri recuribus, super Ioniam procedit. Celebratur maxime Sardibus, in latere montis Tmoli, qui antea Tmolus appellatur, vitibus coaptus, et ex eo profuente Pactolo. *Hist. Nat.* lib. v. Sect. 30.

THIS delightful country is now but thinly inhabited by a few poor *Turks*, and some wandering *Arabs*; and few Wines are now made there but by some *Greek* monks, and chiefly for their own use. Some of these, though made with little art and culture, are light, generous, and very agreeable. But these gentlemen give a different account of a town called *Sidonijah*, which was famous for the goodness of its Wines, and the quantities made there. This town is four hours journey distant from *Damascus*, in the extremity of a fertile extended plain, the see of a bishop, and entirely inhabited by *Greek* christians. These, particularly the clergy, pretend that if any *Turk*, or person of a different nation, was to inhabit there, some terrible misfortune would attend them. Some of the grapes here are of a remarkable size, as large as a pigeon's egg, and of a very exquisite taste. Great quantities of them are sent into *Europe*, and known by the name of *Damask* raisins. The Wines are not made from this kind of grapes, which are chiefly cultivated in their gardens, but from the Vines of the adjacent mountains, of which *Hermion* and *Lebanon* are most contiguous. *Baccius* observes,

observes *, that from this last, Wines were made in his time not inferiour to any of *Italy* or *Spain*; and these gentlemen say †, that the Wine which they drank there, was indeed incomparable. The best is made by the monks, who have there a celebrated convent. It was of a red colour, very generous, grateful, and so light as not to affect the head, though taken freely.

* Ubi nunc colligunt Vina sincera quæ nec cedant Italicis nec Hispanicis. Lib. vii. Hist. Nat.

† Vol. ii. p. 260.

C H A P. VIII.

On the previous Preparations of the Wines of the Ancients, by diluting them with hot Water, and cooling them in Snow. The Structure and Use of the Thermopolium.

FROM this History, we may acquire some general knowledge of the Wines of the Ancients, and the particular qualities of the principal Wines which were most esteemed in those times ; but to form a more true judgment of them, it is absolutely necessary to distinguish those which, in their state of simplicity, with little preparation, were drank pure, from others, which were more exquisitely prepared in the flourishing times of Greece

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and

and *Rome*; when their native Wines were greatly improved, and the *Taste* and *Manners* of the times, were equally changed with their Wines.

It was a general custom to dilute all their Wines with water, and on that account *Hippocrates*, and afterwards the succeeding *Greek* physicians, distinguished them by a general division into *two Classes*; such as would *bear* a small, or required a *greater* proportion of water to be mixed with them. The former, which were weak, required but a small quantity, but those of the strong kind required, in proportion to their strength, a larger quantity of water to make them more grateful and salutary; and to some of their most celebrated Wines when old, this dilution was more necessary, to give them a proper degree of fluidity. Though this was a general rule, yet in their unguarded hours of mirth, and on particular occasions, they often drank their strong Wines without observing any stated rules of mixture or strength.

THE great plenty and variety of the common Wines of *Asia* and *Greece*, before luxury prevailed, will more evidently appear, by taking a very short
view

view of the more authentic accounts, which remain of the fertility of the soil of *Italy*, and the prices of their native Wines. * *Varro* says, that every *Jugerum* of Vines yielded six hundred urns of Wine. According to this proportion, one of our acres would yield about forty-five hogsheads. † *Columnella* says, that each *Jugerum* of Vines in *Seneca's* lands yielded eight *Culei*, which make one hundred and sixty *Amphoræ*; according to which, one acre would yield about twenty-nine hogsheads. The same author adds, that those Vineyards ought to be extirpated which produced less than three *Culei* the *Jugerum*. In these, and the following computations made of the *Grecian* and *Roman Measures*, and *Coins*, I have entirely followed the learned Dr. *Arbutnot* ‡.

§ THE *Jugerum* was a certain space of land, which could be tilled by a *Juga Boum*, or a yoke of oxen, in one day, and is estimated to contain,

* Lib. iii. cap. 9. De Re Rustica.

† Lib. v. cap. 1.

‡ Tables of Ancient Coins, Weights, and Measures, p. 60.

§ Jugum vocatur quod Jugo Boum in die exarari possit. PLIN. Lib. xviii. cap. 3.

in length, one hundred and twenty feet, and in breadth, two hundred and forty feet, making in the whole area twenty-eight thousand eight hundred square feet.

THE price of the common Wines at the Vineyard was very low; for * *Columella* says, that the very worst sort of Vineyards would produce per *Jugerum* a *Culeus* of Wine; that is, about two-thirds of an *Englisch* acre, produced one hundred and forty-three gallons, which was sold for three hundred *Nummi*, or two pounds eight shillings and eight-pence; at this rate the hoghead comes to one pound and eleven pence. But as this was the worst kind of *Wine*, and from the worst *Ground*, and sold at the Vineyard, it will be fair to allow double that price for the common *Wine*, or about eight pound per ton. † *Cicero* states the custom exacted at *Toulouse* four *Nummi* the *Amphora*.

* Quippe ut deterrimi generis sunt Vineæ, tamen si cultæ sunt, singulos utique culeos Vini, singula eorum jugera peræquabant. Utque trecentis nummis, quadragenæ urnæ veneunt. Lib. iii.

† Quaterni denarii in singulas Amphoras, portorii nomine exacti Tolossæ. Cic. pro. M. Tontero.

Amphora vigessis, modius datur ære quaterno.

MART. Lib. xii. Ep. 76:

BUT

BUT the Wines of the best growths sold at a different price. There is a remarkable passage in * *Pliny* concerning the price of Wine, which may be considered as a standard, from whence we may make a general estimate of the price of their best growths. He says, that in the consulate of *Optimius* A. U. C. 633, being an excellent Vintage, Wines were laid in, at that time, at an hundred *Nummi* the *Amphora*, which will be at the rate of seven pounds one shilling and ten pence the *Englisch* hoghead, which is a higher price than what is mentioned by other authors: But as this Wine advanced in age the price encreased, and in the succeeding times of opulence and luxury, when the genuine and best foreign Wines were imported, an *Amphora* of the best kind of *Chian* was sold for a thousand *Nummi*, or eight pounds eleven shillings and five-pence.

* *Optimio* consule cum *C. Gracchus* tribunus plebem (seditionibus agitans interemptus) ea cæli temperes fulsit quam cocturam vocant, solis opere natali urbis 633. Durantque ad huc Vina ducentis fere annis—quod, ut ejus temperis æstimatione in singulas *Amphoras* centini *Nummi* statuantur, ex his tamen, usura multiplicata semissibus—anno 160 singulas uncias Vinis constituisse, nobili exemplo docuimus.

THE common Wines therefore being so cheap, and in such plenty, were, without any expensive preparation, drank out of the wooden casks, in which they were kept. *Cato* informs us, that the general allowance of Wine to each servant in the family for a year, was ten *Quadrantalia*, or *Amphoræ*, which is somewhat more than a pint and a half a day; but that during the time of the * *Saturnalia*, he allowed to each of his servants a *Congius* of Wine every day, which is somewhat more than seven of our pints; but as *Cato* † loved Wine, he was probably more liberal to them in that article.

THE common light *Asiatic* and *Greek* Wines, though preferable to those of *Italy*, were never exported; nor were their best *genuine* or *adulterated* Wines exported in any considerable quantity, till affluence and luxury began to prevail among the *Romans*, when the demand for them very quickly encreased.

* In Saturnalibus et compitalibus, in singulos homines Congios—— De Re Rustic. cap. 57.

† Narratur et prisci Catonis
Sæpe mero caluisse virtus. HOR. Lib. iii. Ode 21.

* PLINY speaking of the rapid progress of luxury among the *Romans*, confirms it by a remarkable anecdote, which *Varro* mentions of *Lucullus*, who said, that while he was a boy, he never but once remembered to have seen *Greek Wine* brought to his father's table; yet this *Lucullus* lived to give a most eminent instance of its great plenty, when on his return from his *Asiatic* conquests, he bestowed, as a donative to his soldiers, above a hundred thousand *Amphoræ* of *Greek Wine*; and gives another instance of the same kind of *C. Sentius* (whom many then living remembered when he was prætor at *Rome*) who said that the first time he had ever seen *Greek Wine* in his father's house, was when it had been medicinally directed to him as a cordial.

As this quantity of *Greek Wine* given by *Lucullus* was so very great, *Budæus* reads *Congiariorum* for *Congiarum*, and thinks, that *Cadorum*

* Quibus Vinis autoritas fuit, Varro his verbis tradit—Lucullus puer apud patrem, nunquam lautum convivium vidit, in quo nisi semel Græcum Vinum daretur: Ipse vero cum redux ex Asia, millia Cadum in Congiarum (quod donativum) militibus centum dedit: Et C. Sentius (quem prætorem vidimus) Chium Vinum domum suam allatum, dicebat, tam primum, cum sibi cardiaco medicus dedisset. Hist. Nat. Lib. xiv. cap. 14.

Congiariorum,

Congiariorum, signifies *Cadi* of the capacity of a *Congius*; but * *G. Agricola* more justly explains *Congiarium Cadorum*, a *Congiary* of so many *Cadi*. Nor is this quantity very surprising in this instance, when as † *Pliny* mentions, *Hortensius* left to his single heir a hundred thousand *Cadi*, or four hundred and ten tons of Wine. These Wines must have been of the best and strongest kind, otherwise they could not have been bequeathed as permanent legacies.

IN this advancing progress of affluence and commerce among the *Romans*, foreign Wines were soon imported in large quantities; all the useful and polite arts, by being more encouraged, were more improved, and those of luxury advanced in the same proportion. Their native Vines were cultivated with more art and industry.

FROM this period of time we may be able to form a more true judgment of the Wines of the Antients, by comparing the accounts given of them in

* Vide Arbuthnot, ch. ix. p. 85.

† Lib. xiv. cap. 15.

this advancing progress to more perfection, with those which were formerly made in a more simple manner, and with others which deviated, at length, from their improved state, by being artificially made in imitation of them.

THE Ancients were not more curious and judicious in the choice of their Wines, than of the water with which they were diluted, in proportion to their different strength, and prepared in a particular manner before they were brought to their tables. The previous preparations of these Wines greatly altered or improved the natural qualities of them. From the want of a sufficient knowledge and attention to these circumstances, several passages in the Historians and Poets relating to them have been mistaken by the commentators, and some moderns have cavilled about a very material article, whether they usually drank their liquors cold or warm?

HOWEVER, the manner of drinking these Wines, as * *Galen* expressly observes, was various, accord-

* *Meth. Med. Lib. vii. cap. 6. et Comment. in iii. Epidem. Hi meraciorem, illi sumunt dilutiorem, nonnulli temperatum: Sunt qui frigidam, alii calidam, atque utramque aut de more, aut insueti biberant.*

ing to the habit or caprice of individuals; *some drinking them cold*, others *hot* or *tepid*, *plain*, or *mixed* with a greater or less quantity of water; yet these are not to be considered as the more established rules which prevail in all countries, and which chiefly determine the nature and qualities of their Wines, and the manner of drinking them. But no part of history is more evident, than that the *Orientals*, the *Greeks*, and *Romans*, usually drank their liquors cold, and that they were taken warm only occasionally, and chiefly by valetudinarians, to whom they were often directed by physicians as a necessary part of their regimen. * *Seneca* tells his infirm friend, when he invites him to supper, that he shall be entertained by him as a valetudinarian, and drink his Wine diluted and warmed; a restraint which, in their state, they must submit to; but which, to the delicate and luxurious, would be intolerable. † *Martial* particularly com-

* Cænabis tanquam æger, sed omnia ista perferemus, sorbitones et calidam, quod intollerabile delicatis et luxu fluentibus. Ep. 73.

† Setinum, dominæque nives densique trientes.
Quando ego vos, medico non prohibente bibam.

Lib. vi. Ep. 86.

Et potet calidam qui mihi livet aquam. Ib.

plains

plains of this disagreeable restraint, and ardently wishes to return to his cooling draughts. But the best physicians condemned this habit, when too long continued. * *Hippocrates* enumerates the various bad effects of the continued abuse of warm diluting liquors, from a gradual increasing relaxation of the vessels, and particularly of the nervous system, to a total imbecillity of mind and body. † *Athenæus* says, the *Rhodians* were remarkable for their pale effeminate complexion, which they acquired from the excessive use of warm water. ‡ *Juvenal* censures them on the same account, and § *Martial* humourously ridicules *Sabellus*. *Augustus*, who had enervated his constitution by this regimen, was cured by *Antonius Musa*, who particularly directed him to drink his Wine cold, and to use cold bathing. || *Pliny* likewise mentions,

* Aph. xvi. Sect. 5.

† Lib. viii. Et Cæl. Rhodig. Lib. xix. cap. 6. Rhodios esse Spatalones et Thermopolas id est fluere deliciis et calidum bibere.

‡ Forfitan imbelleis Rhodios, unctamque Corinthum
Despicias merito. Sat. viii. v. 112, 113.

§ Natali pallere suo, ne calda Sabello, desit.

Lib. xii. Ep. 60.

|| Lib. v. cap. 1.—Lib. xxv.

that *Claudius* was cured of an obstinate disorder arising from the same cause, by his physician, who advised him to drink his Wine cold, and gives that as a motive for his son being afterwards made quaestor.

SEVERAL who have been induced to think that the Ancients usually drank their Wine and Water warm, have fallen into this error, from not making a *Distinction* between the *different* manner in which the valetudinarians and healthy usually drank their Wines; and from a superficial attention to some remarkable passages, which, though produced by them to *support* their opinion, when rightly considered, are the strongest evidences *against* it. It was a common and a prudent custom among the Ancients, to *boil* the water before it was afterwards used *cold*. The *Greek* physicians particularly condemn crude water as flatulent, and apt to oppress the stomach; for all water being in some degree impregnated by the soil through which it passes, or in which it has long stagnated, becomes by boiling more pure; the active impure parts exhale; and the more heavy, when it cools, subside; the insects with which it often abounds are destroyed, and

and it is rendered more light and salutary. But another important use was made of this previously boiled water, which not only clearly *explains* the sense of these passages, but points out the *Manner* in which they drank their Wines, and the *peculiar* nature and qualities of them. They did not think it sufficient to dilute their Wines with the purest cold water, but, to gratify their taste, they frequently added snow, or ice, which were apt to vitiate the water by their impurities. But the manner of cooling and diluting their Wines was greatly improved, by immersing the vessel which contained the Wine mixed with boiled water, into *Snow*; by which means it very quickly received a more pure, equal, and intense degree of coldness, and is on that account particularly distinguished by *Martial* *.

THIS invention † *Pliny* ascribes to *Nero*, who valued himself more on this improvement in lux-

* Non potare nivem, sed aquam potare regentem

De nive, commenta est ingeniosa fitis.

Lib. xiv. Ep. 117.

† Neronis principes hoc inventum fueris decoquere aquam, vitroque dimissam in nives refrigerare, ita voluptas frigoris contingit sine vitio nivis omnem itaque decoctam utiliore esse convenit item calefactam citius refrigerari nobilissimo hoc invento. Lib. xxxi.

ury, than *Augustus* did on encouraging the finer arts; but though he might have been the first who introduced the more frequent use of it at *Rome*, it was undoubtedly a very ancient custom. *Celsus* gives to *Asclepiades* the merit of reviving it among the *Greeks*. * *Herodotus* mentions, that when the king of *Persia* went with his army on an expedition, he drank no water but what had been taken from the river *Choaspes*, which being first boiled, and afterwards received into silver vessels, was conveyed in four wheeled machines, drawn by mules, wherever he went, and kept solely for the use of the king. † *Athenæus* confirms this account, and mentions the manner in which this royal water was conveyed and preserved, and says it was of the lightest and most grateful kind. ‡ *Alexander*, in his *Indian* expedition, at the siege of *Petra*, directed thirty pits to be made as reservoirs for snow, which were covered with straw, to defend it against the external air; with this his Wine and water was

* Και δὴ καὶ ὕδωρ ἀπὸ τοῦ Χοασπεῦ ποταμοῦ ἀμὰ ἀγέλαι τε παρὰ Σησα ρε-
οντ^ς, τε μόνῃ Βασιλεὺς πίνει, καὶ ἄλλῃ οὐδεν^ς ποταμῷ· τὴν δὲ Χοασπεῦ
τὴν ὕδατ^ς ἀπεψήμεν, πολλὰι ἀμάραι τετρακυκλοὶ ῥημιονεῖαι κομίζεσθαι ἐν ἀρ-
γυρείοις ἀγείοις ἐπὶται οἷοι αὐ ἐλαυνοὶ ἐκασοτε. In *Clio*, cap. 1.

† Ctesius Cnidius, apud Athen. Lib. ii. cap. 2.

‡ Chares Mytellen. apud Athen. lib. iii. cap. 21.

cooled.

cooled. * *Galen*, who was long acquainted with this method of preparing the water in his own country, particularly recommends it; and says, that the custom then prevailed at *Rome* of preparing their water by first boiling it, and afterwards cooling it in snow, and that it was then called *Decocta*. This distinguishing term therefore not only denotes cold water, which had been *boiled*, but which had been afterwards made more exquisitely cold, by being cooled with ice or snow; which is strongly expressed by † *Juvenal*, and distinguished by ‡ *Martial* with the name of *Nobile Frigus*.

THIS prevailing custom not only contributed to make their Wines more agreeable and salutary, but the hot water was often necessary to dissolve their more inspissated and old wines. Several passages in the Poets, which only regard this previous and elegant preparation of the water, either appear obscure, or have been mistaken for the *Manner* in

* Ως εν Ρωμη σκευαζειν εθες εχουσιν προσθεμαινουσις καλαρευση, ην αυτον προσαγορευουσι Δεκοκταν. Meth. Med. Lib. vii. cap. 4.

† Frigidior Geticis petitur decocta pruinis. Sat. 5. v. 50.

‡ Quo tibi decoctæ nobile frigus aquæ. Lib. xiv. Ep. 116.

which

which they drank their Wines. Thus * *Horace*, when he endeavours to disengage his friend *Telephus* from his anxious attention to serious affairs and studies, excites him, with his peculiar spirit, to direct his thoughts to what may much more conduce to his real happiness; how they may purchase a cask of the best *Chian* Wine? And who can best prepare the *boiled* water, that, when *cooled* in snow, it may be drank in the greatest perfection? Which is undoubtedly the true sense of this passage, but mistaken by all the commentators.

As boiled water was thus necessarily and universally used, there were particular places at *Rome* where it was publicly sold, called *Thermopolia*, from those of the same kind in *Greece*. There were two sorts of *Thermopolia*, the one in which the hot water was prepared for the *Baths*, the other in which water of a much purer kind was prepared for drinking, and in vessels of a very different structure. This kind is mentioned by several *Greek*

* Quo Chium pretio cadum

Mercemur; quis aquam temperet ignibus.

Lib. iii. Ode 19.

and *Roman* authors. * *Vitruvius* has given a general description of the *Thermopolium*. † *Seneca* is more particular, and has added the curious course of the serpentine tubes, through which the water is more quickly heated in its passage to the *Caldarium*. It was composed, he says, of three different reservoirs made of copper, which communicated with each other; the first and highest received the cold water from an aqueduct, and was called the *Frigidarium*; the second, *Tepidarium*; and the third *Caldarium*, which was heated by a fire placed immediately under it. The passage of the water from the *Frigidarium* into the *Tepidarium* was directly perpendicular, through an intermediate cylindric tube, but from thence into the *Caldarium* through a long *Series* of *serpentine Tubes*, which *surrounded* it in an oblique direction. By this ar-

* *Athena supra hypocaustum tria sunt componenda: Unum Caldarium, alterum Tepidarium, tertium Frigidarium; et ita collocanda, ut ex Tepidario in Caldarium, quantum aquæ caldæ exierit, influat de Frigidario in Tepidarium, ad eundem modum. Lib. v. cap. 10.*

† *Facere solemus dracones et miliaria et complures formas, in quibus ære tenui fistulas struimus per declive circumdatas: Ut sæpe eundem ignem ambiens aqua per tantum fluat spatii, quantum efficiendo calori sat est, frigida namque intrat; effluit calida. Quæst. Nat. lib. iii. cap. 24.*

tifice, the water moving through such an extended surface, very quickly acquired a heat, equal to that in the *Caldarium*, and immediately supplied the same quantity of hot water to it, which at any time had been drawn from it; by which *Mechanism* the *Caldarium* was instantly supplied with hot water, and each *Reservoir* was equally full with different waters. These *Reservoirs* are often called *Miliaria*.

THOUGH the *Thermopolium* and *Milliarium* are often mentioned by different authors, as *Plautus*, *Cato*, *Palladius*, and *Athenæus*, yet the description given of its structure, and of other curious circumstances relating to it, must have continued after so many centuries very perplexed, had not *Andreas Baccius* met with a particular opportunity of examining the remaining ruins of the *Dioclesian Baths*, in which he was assisted by two learned Antiquarians; who, by tracing them accurately, and comparing their observations, were enabled to illustrate *Seneca's* description of the *Thermopolium*, and to form a plan of it, with such ornaments, as probably graced it in its original state. By their industry, this curious piece of antiquity has been preserved

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preserved from more obscurity and oblivion ; and as this treatise of *Andreas Baccius* is to be found but in very few libraries, I have here added the Plate which he has given of it, and the passage in his book, to which this refers *.

AMONG several *Thermopolia* at *Rome*, some one was probably more distinguished than any other, not only for its structure and elegance, but the superiour qualities of the water with which it was

* “ *Thermopolii artificium cum Miliariis vasis, ad usum cale-*
 “ *faciendi aquas uti potibus communem, plane declarat Græca vox*
 “ *a Σειμα et πολς a calida aquæ multitudine. Sicut Ονοπολιον, quod*
 “ *emporium erat seu publica Vini officina: Miliarum vero in illo*
 “ *vala erant ad munus egregii operis hoc solum nomine admirabile,*
 “ *quoniam vel minimo horarum spatio, susceptam superne a fornice*
 “ *Thermopolii aquam per emissarium publicum, calidam tanquam*
 “ *a perenni fonte indeficientem dabat ; ut universum simul, ac se-*
 “ *mel satiaret populum Romanum : Qui ritus diminute ac per ob-*
 “ *scure ab auctoribus elicitur : Supponebant enim illi rem com-*
 “ *munissimam et usu notam : Cujus equidem vestigia partim ex*
 “ *eisdem persequutus, ac partim sensu ipso rimatus locum cum Bo-*
 “ *narto Trismegisto altero dum sub Pio IV. pontif. Thermæ*
 “ *Dioclesianæ reformarentur in ecclesiam tantum opus iste et An-*
 “ *tonius Aleghrettus nobilis physiologus Florentinus in hanc excu-*
 “ *dimus formam nunquam abolendam. Vitruvius usum et modum*
 “ *explicat. Summa vero artificii usus est, unde eadem in tribus*
 “ *vasis fervaretur aquarum proportio; calidæ, tepidæ, frigidæ, ut*
 “ *quanta jugiter ex interioribus vasis hauriretur calida, et succeffive*
 “ *tepidæ, tantundem frigidæ descenderet calfieretque ut eodem te-*
 “ *nore et calore nunquam deficeret.” Lib. iv. p. 178.*

furnished from a particular aqueduct. The city was supplied with a plenty and variety of waters from different distances and heights ; and as they so much contributed to the health of the inhabitants, the peculiar care of them was committed to the *Ædiles*. * *Julius Frontinus*, and *Raphael Fabrettus*, two learned antiquarians, have given a particular description of them, and plates of the remaining ruins, which will fully satisfy the curiosity of those that are desirous of being more informed. Among those aqueducts, the *Aqua Martia* was particularly celebrated for its purity. It was repaired by *Agrippa* when he was *Ædile* ; and as its water was often deficient in the summer, † *Augustus* ordered another aqueduct to be made, which occasionally conveyed water into it from a different spring of equal goodness. § *Pliny* mentions the *Aqua Martia* as preferable to any other for its salubrity and coldness, and says it was a peculiar

* Vid. Comment. Sext. Jul. Front. et Dissertationes Raphael. Fabretti de Aquis et Aquæductibus Romæ Veteris in Tom. 4to. Antiquit. Roman. edito a G. Grævic.

§ Clarissima aquarum omnium in toto orbe, frigoris salubritatiffue præconio urbis Martia erat, inter reliqua Deûm munera urbi tributa. Lib. xxxvi. cap. xv.

bleſſing granted by the Gods. * *Propertius* takes notice of the uncommon ſtrength and beauty of this aqueduct, and † *Martial's* numbers run more ſmooth than uſual, when he deſcribes its ſerene motion and transparency. I more particularly dwell on the praiſes of this water, as it very probably ſupplied that principal *Thermopolium* deſcribed by *Seneca*: For we find that the *Aqua Martia*, on account of its ſplendour and purity, was ſolely appropriated to drinking; nor would they ſuffer it, like that of other aqueducts, to be contaminated by a common uſe ‡. This ſeems to be confirmed by *Tibullus* §, who likewiſe points out the uſe of it, in diſſolving the old inſpiſſated Wines. This warm water was ſo neceſſary to temper their Wines, and

* — æternum Martius humor opus.

PROPER. Lib. iii. El. 22.

† Quæ tam candida, tam ſerena lucet

Ut nullas ibi ſuſciperis undas

Et credas vacuam nitere Lygdon.

Lib. xvi. Ep. 42.

‡ Omnes ergo diſcerni placuit tum ſingulas ita ordinari ut imprimis aqua Martia ſplendore et rigore gratiſſima potui tota ſerviat. Commentar. Sext. Jul. Frontin.

§ Temperet annofum Martia lymphæ merum.

Lib. iii. El. 7. v. 26.

to prepare them for being afterwards cooled in the snow before supper, that, by a stated rule *, the servant who neglected to bring home, at a certain hour, the warm water, was to be punished with stripes, in proportion to the time during which the supper was put off, beyond the usual hour. It frequently happened that the servant who had been employed to mix the Wine with the water at the *Thermopolium*, drank privately of it, and sometimes so freely as to get drunk there, which is particularly mentioned by † *Plautus*; and in another ‡ comedy he introduces *Palaestrio* accusing *Lucrio* of having drank, or given away, some of the Wine, who with some humour endeavours to evade the charge against him.

* Ammianus, lib. xxiv. cap. 4.

† Quos semper videas bibentes esse in Thermopolio;
Ubi quid furripuere, aperto capitulo calidum bibunt,
Tristes atque ebrioli incedunt.

In Curculio, Act ii. Sc. 3.

‡ *Palaest.* Procede huc, promisti tu illi Vinum?

Luc. Non prompsi.

Palaest. Neque tu bibisti?

Luc. Dii me perdant, si bibi.

Palaest. Qui jam?

Luc. Quia enim absorbui, nam nimis calebat;
Amburebat gutturem.

In Milit. Glorios. Act iii. Sc. 2.

THE

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THE *Thermopolium* was usually furnished with several Wines and vinous preparations, as described in the plate, and which is likewise confirmed by * *Plautus*. It was usual, with such who had not Wine in their own cellars, on occasional entertainments, to send for it, prepared at the *Thermopolium*, and cool it afterwards in snow; others often stopped there, as in a dram shop, and drank the Wine hot; and this vice was so common, that *Thermopolare* expressed a drunken fellow, who had been tippling there; for Wine thus heated, inebriated them sooner than cold Wine. On this account old debauchees, whose stomachs could no longer bear liquors cooled, drank the Wine thus heated. This was at length the case of *Nero*, who was thence called *Caldus Nero*, and *Tiberius*, *Biberius Caldus*.

* *Pseud.* Ecquid habet his homo aceti in pectore?

Cba. Atque acidissimi.

Pseud. Quid, si opus sit, ut dulce promat indidem, ecquid habet?

Calid. Rogas?—

Marrhinam, tu passum, defrutum, melinam, mel quojusmodi

Quin in corde instruere quondam capit Thermopolium.

In Pseudolo, Act ii. Sc. 4.

As

As the *Thermopolium* was thus a necessary part of luxury to the great, and of debauch and mirth to others, * *Dio* mentions that *Claudius*, to subdue more effectually the temper and spirit of the people, ordered all the *Thermopolia* to be demolished; and the same † author says, that *Caius Cæsar*, on a public mourning for his sister *Drusilla*, ordered all the *Thermopolia* to be shut up, and made it a capital crime to any one, who, during that time, transgressed this law, and that one person was actually put to death. This is less surprising, as by the same edict he forbade any one to sup in company with their nearest relations, to engage in any chearful amusements, or even to laugh. Such has been the severe, and often ridiculous exertion of arbitrary power!

THE custom of cooling Wines with snow was derived from the *Asiatics* and *Greeks* to the *Romans*. ‡ *Plutarch* describes the manner in which they preserved it, by covering it with straw, and

* Τα τεκαπηλεια ες ασυνουσις επινον, κατελυσε και προσηταξει μητη κρειας πως εφθου μηθ' υδωρ θερμον πιπρασκισθαι, και τινας επι τωτῃ μη περιερχησαντας εκολασεν. *Dio*, lib. lx.

† Lib. lix.

‡ *Sympof. lib. vi. Qu. 6.*

coarse cloths unshorn. * *Xenophon* says it was necessary to procure snow to cool the Wines in summer, which otherwise could not be drank with any pleasure. The *Orientals* more early used it for this purpose, and *Athenæus* mentions it as an ancient custom, and that they used oak branches for the same purpose. Various instances among the eastern nations of this custom of cooling their Wines may be produced, and particularly among the *Jews*. † In some hot countries it was often difficult to obtain it, and they were obliged to search into the hollow cliffs to collect it. Mount *Hebron*, which was always covered with snow, plentifully supplied the inhabitants of that country, from whence it was often carried to *Tyre*. *Solomon* beautifully compares the effect of glad tidings on a mind anxious and expecting, to that pleasing sensation which one fatigued with labour in a hot day, receives from drinking cold liquors.

THE mixture of hot water, of the purest kind, with Wine, and in a just proportion to its strength,

* *Ἰνα δὲ καὶ ἡδυνῶς πινέας οἶνος τε πολυτέλεις παρασκευάζῃ καὶ τὰς θερμὰς χιονὰ περιβύστα ζῆναι.* De dictis et factis Socratis.

† Hi nives, illi glaciem potant, pænasque montium in voluptatem gulæ vertunt. PLIN. lib. xix. cap. 4.

and afterwards cooling them in snow, was a much more elegant and salutary preparation, than a mixture of cold water with the Wine, or when impregnated with ice, which was the common method of cooling and diluting their liquors: Neither will Wine easily *unite* with water, in an equal and uniform manner, but when in that heated and *rarefied* state, they are immersed in snow, and their different parts are strongly *compressed* and *condensed*, they acquire a union as equally firm and permanent, as if the Wine had been *originally* of that degree of strength to which it is *reduced*, and without being deprived of any of its peculiar qualities. This change must be very quick and powerful, since it is well known that boiling water immersed in snow, will sooner acquire an *exquisite Degree* of coldness, than when it is immersed in its common cold state.

THE best physicians among the Ancients, and particularly *Hippocrates*, have given very clear precepts in regard to the use of warm, or cold liquors, in different climates, constitutions, and diseases. In the former part of this chapter *, I

* Vide p. 155.

have

have mentioned the ill effects which he assigns to warm liquors; and in a * succeeding *Aphorism*, he recites the bad effects arising from a frequent use, or excess of cold liquors: That they are apt to bring on *Convulsions*, *rigid Spasms*, *Mortifications*, and *chilling Horrors*, terminating in a *Fever*.

IN another succeeding † *Aphorism*, where he adds, that *cold Liquors* are particularly injurious to the *Breast*, and bring on *Hæmorrhages*, a *Cough*, and *Catarrhs*, he makes use of the same expression, τα ψυχρα, to denote the *Nature* of them, and expressly mentions their being prepared, or rather impregnated with snow or ice: From whence it is evident, that the use of these cold liquors was very frequent in his time, and that he was probably not unacquainted with the more elegant manner of preparing them, by an immersion in snow; for he often condemns waters from *dissolved* ice, or snow, from their impure and crude qualities. These are the general effects from an excess in cold or hot li-

* Το δε ψυχρον, σπασμους, τετανους, μελασμους, ριγηα πυρετωδεια. Sect. v. Aph. 17.

† Τα ψυχρα οιοιχτων, η κοιταλλου τω σηθει πολυμια βηχων κινητικα, αιμορραγικα, η καταρροικα. Sect. v. Aph. 24.

quors ; though the same effect is often produced by *opposite* causes, and a *burning* quality has been given to *cold* by the most elegant writers*.

HIPPOCRATES is very concise but expressive on this subject, and extends his observations on the improper use of cold external applications. *Galen* gives several exact rules and cautions relating to *Iced liquors* : That “ great regard must be had to “ the *Constitution, usual Habit, and Climate* ; for “ that such persons who have not been *accustomed* “ to them, who are of a *cold* constitution, especially in an advanced *Age*, and who live in a “ *cold* climate, especially in the *Winter* time, will “ be most injured by them ; but that in different “ constitutions, and circumstances, they may be “ used more freely.”

It appears, however, from repeated experience, that iced liquors are not only grateful and salutary in hot climates, but often necessary to preserve

* — Boreæ penetrabile frigus adurat. VIRG. Georg. i.

Ambusti multorum artus vi frigoris. TACIT. Annal. lib. xiii. cap. 24.

Perusti artus membra torrida gelu. LIV. lib. xxi.

health,

health, by restraining and moderating profuse sweats, which deprive the blood of its finer parts, and to make the other discharges and secretions more regular; and have been found extremely useful in colder climates, when moderately animated with Wine, especially to such who have relaxed their stomach by a large use of *Tea*, which often renders the infusion of this *Plant* more noxious than any of its natural qualities. They are particularly dangerous when drank after being previously heated by exercise, at which time they are particularly grateful, and suddenly chill and contract the vessels of the stomach, and the adjacent parts, and are apt to produce either immediate *inflammatory* diseases, or more slow and *chronic* obstructions. * *Seneca*, with a peculiar sagacity, asketh if the frequent use of them will not at length produce a *Schirrhus* in the *Liver*? They are certainly prejudicial to old men, and persons of a cold, low constitution, and especially in the winter season; when either from a compliance to custom, or the immediate gratification of the stomach, they can only be tempted to take them; and

* Quid tu illam æstivam nivem, non putas callum obducere jecinoribus. Ep. xix. ad Lucul.

in a quotation which I have lately mentioned from *Xenophon*, that it is absolutely necessary to cool their Wines with snow to make them agreeable; he limits particularly this rule to the summer season.

RAMAZZINI, an ingenious *Italian* physician, has wrote a learned Treatise on the diseases chiefly incident to persons from their different trades and occupations, and has added a chapter on those, to which Princes, from their affluent fortunes, and usual manner of living, are particularly liable: As their tables were constantly supplied with *iced Liquors*, and as he had frequent opportunities of seeing instances of the good and bad effects of them, his observations well deserve our attention. He says *, that when moderately used, and *pru-*

* Ecce quidem si rectus est nivis usus atque ut juristæ solent dicere cum moderamine inculpatæ tutelæ, pro singulari beneficio a divina bonitate ad repellendam æstuantis aeris violentiam nex esset accipienda; in locis præsertim calidioribus in Sicilia, in regno Neapolitano, ac tota fere Italia, tum pro sanis atum pro ægre corporibus. Ubi enim, ut aliquando evenit, cum per hyemem, vel paucæ nives vel nullæ a cælo delapsæ fuerint ac propterea nivalis an non celeritate laboretur, annus ille pro *nefasio* habetur nec observatione caret, quod in hujusmodi casu longe plures et graviore morbi vagati fuerint quam in cæteris temporibus, p. 423.

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dently directed, they may be justly considered as a singular blessing bestowed on the inhabitants of that country, not only in preserving their health, by restraining the violence of the heats when they prevail, but likewise as a salutary remedy to *restoring* it; and that whenever by a milder winter they are deprived of their usual supplies of snow, it is marked by them as a bad *Omen*, and that the diseases in the succeeding seasons are more frequent and dangerous.

BUT he likewise observes *, that various diseases arise from the intemperate use, which he refers to those recited by *Hippocrates*. Among the prevailing errors in the use of these liquors, he particularly mentions the taking large draughts of them when the body has been previously over-heated, and that † instances are known when a sudden *Syncope*, as quickly fatal as a draught of poison, has succeeded: To guard against the bad effects of them he particu-

* Ita non pauca et vulgaria sunt mala quæ ab immoderato ejus usu proveniunt quæ recensuit. HIP. Sect. v. Aph. 18 et 24.

† Nec desunt exempla eorum qui post gelidæ potionis haustum Syncope correpti fuerint, et non secus ab epoto veneno repentes interierint.

larly recommends swallowing them slowly, and in moderate quantities. * He greatly condemns the *acid*, and *congealed* preparations of ice.

THE *Romans* at length, from the prevailing and irregular use of cooling liquors, acquired such a vitiated taste, that they frequently added snow and solid ice to their cups, which † *Seneca* severely censures, and ‡ *Plautus* justly places in a ridicu-

* Profecto potiones illas et forbitiones ex acido citri, lemonum cum saccharo ad congelationem quas ingeniosa sitis commenta est nemo sanæ mentis usquam laudavit dum ad illorum discensum horrescunt viscera et occalescit stomachus. P. 424.

† Viscera istorum vitiiis torpentia nihil sentiunt nisi frigere illa vehementiore perufferis. Inde est inquam, quod nec nive quidem contenti sunt, sed glaciem, velut certior illi ex solido rigor sit, exquirunt, ac sæpe repititis aquis diluunt: Quæ non e summo tollitur, sed ut vim majorem habeat et pertinacius frigus, ex abdito effodient. SENECA Nat. Quest. lib. iv. cap. 13.

Ubi quotidianis cruditatibus non temporis æstus; sed suos sentit. —Itaque non æstate tantum, sed et media hyeme nivem hac causa bibunt. Ibid.

‡ *Phæd.* Viden' ut ex palluit! datin' isti sellam, ubi affideat, cito:
Et aequalem cum aqua? Properatin' ocyus?

Curc. Animo male est.

Phæd. Vin' aquam?

Curc. Si frustulenta est, da obsecro, hercle, obsearbeam.

In *Curculio*, Act ii. Sc. 3.

lous light, by introducing a fellow almost fainting on the stage, and begging for solid ice in water to revive him.

As the Wines of the Ancients, and preparations of them were various, and the customs and manners of the times successively changed, several passages relating to them must remain obscure; nor can we expect to trace the true sense of them from *single* instances, but by comparing them with others, which are delivered down to us by the best authorities, and are capable of being farther confirmed by the established principles of Fermentation, and the general principles of Wine. The Ancients, particularly *Plato*, *Xenophon*, *Plutarch*, and *Athenæus*, have more expressly treated this subject in their *Symposia*, where the guests were the most distinguished characters of that age, and their taste and manners often varied. I shall therefore, in a subsequent chapter, take a short view of them, and chiefly dwell on such circumstances which are either obscurely delivered, or may contribute to enlarge our knowledge of their Wines, and the *Order* and *Manner* in which they were drank in their convivial meetings. Among the *Romans* who did

not write directly on that subject, *Cicero* and *Seneca* have made many useful observations, and even several fragments of the *Poets* relating to these Wines, which still remain obscure, by comparing them with other known rules and customs, will, like antique medals, give and receive a mutual lustre, and more clearly determine what the commentators have either mistaken, or explained in a perplexed manner. * The *Glycon* in *Horace* was long supposed by them to have been a certain philosopher, eminent for his writing on athletic exercises, or some gladiator famous at that time for the strength of his limbs and muscles; but this obscurity immediately ceased when the *Farnese* Statue of *Hercules* was found, and an † inscription on the bottom of one of his feet, that *Glycon the Athenian made it*; whose works were then as well known, and distinguished by his *Name*, as some of our most valuable pictures are now, by that of a *Raphael*, *Titian*, or *Claude Lorraine*.

THE Ancients, we find, were particularly careful in procuring the best kind of water for their ge-

* Nec, quia desperes invicti membra Glyconis. 1 Ep. i.

† ΓΛΥΚΟΝ ΑΘΗΝΑΙΟΣ ΕΠΟΙΗΣΕΙ.

neral use: The health of the inhabitants in different countries and situations, greatly depends on the purity of this universal diluting fluid. It was a necessary ingredient in their Wines to make them more grateful and salutary, and in their convivial entertainments this mixture was regulated by stated rules, according to the strength of them. In some of their generous cups the quantity of water exceeded that of the Wine, and the physicians with more exquisite care directed the proportion in different diseases. I shall therefore, assisted by the observations of the Ancients, and the more accurate experiments of some late eminent writers, give a short account of the nature and different qualities of Water; which is not only a principal ingredient in these Wines, but in other compounded liquors, and greatly contributes either to improve, or vitiate the nature of them.

C H A P. IX.

Of the Nature and different Qualities of Water.

WATER, which consists of its own elementary parts, unmixed with any other, is a light, transparent fluid, without any taste or smell. But it is impossible, and perhaps not necessary, that it should exist in this simple state; it is not only easily susceptible of imbibing the air, but is so intimately united with it, that it cannot by the greatest power of the air-pump be entirely disengaged from it. The air is likewise an elementary lighter fluid, which is never entirely pure and unmixed, but rather a *Chaos* of an infinite variety of exhalations from other bodies, which perpetually

float

float in it. All Waters are likewise impregnated with the materials of different *Soils*, which they are capable of dissolving in their passages through, or stagnancy in them, and therefore their nature and qualities must be very different.

MANY have been inclined to determine the purity of Waters from their *Weight*; but though in general the lightest Water is the purest, yet this is no certain test; for several volatile, and more active bodies, are often mixed with Water, which rather lessen its gravity, and greatly vitiate its purity.

WATER, from its peculiar nature, cannot be *compressed* into a less space; yet from the levity of its parts, and particularly of the air combined with them, it is easily capable of being rarefied, and rendered lighter, by different degrees of *Heat*; on which account it is difficult to fix a standard of its *real weight*: * The most approved method is by comparing the gravity of the best common cold Water with the more fixed and immutable weight of any other body, particularly gold, whose spe-

* Vid. Boyl. Med. Hydrost. et Aët. Lypf. 91. 196.

cific gravity has been estimated to be to that of water, as 4909 to 250, almost as twenty to one. In the same manner the superiour gravity of Water, to that of air, has been found to be 850 to 1.

THE *Fluidity* of Water (and of every fluid) certainly depends on the particles of *Fire* mixed with it, which pervade all bodies, both solid and fluid; for under the *thirty-second* degree of heat in *Fahrenheit's Thermometer*, it consolidates into ice, and immediately above it, not only becomes fluid, but continues equally fluid in every superiour degree of heat. This is a *singular* property in Water, which * *Sir Isaac Newton* has proved by an elegant experiment on *Pendulums* performing equal vibrations in equal times, either in the coldest or the hottest Water. Neither will exhalations from pure Water, where the component parts are *similar*, alter the fluidity of those which remain. Though we cannot exactly determine the size of the component elementary parts of Water, they seem to be more minute than those of air. It is evident from various experiments that they will freely pass

* In *Optic*, p. 312.

through

through several bodies impervious to the air; on which account they are so easily separated from each other, rarefied, and rendered volatile by heat or motion. * Doctor *Halley* has proved the easy separation and volatility of the parts of Water, by putting salt-water into a cylindric tube, whose height was four inches, and whose orifice was about eight, which placed in a quiet situation, and exposed to a degree of heat equal to that of the sun in the hottest summer's day, exhale in twenty-four hours six ounces, or two-thirds of an inch; yet during this free exhalation, not the least visible vapour could be discovered: † But when this vessel was placed in a cold situation, defended from the sun and wind, it did not exhale more than eight inches in a whole year; for a dry wind, like heat, quickly dissipates the particles of Water; and from a course of such experiments, the same ingenious author has estimated the immense quantity of water, which by winds, and the heat of the sun, is exhale in one summer's day from the *Mediterranean* sea and rivers, which afterwards de-

* *Philos. Transf.* No. clxxxix. p. 366.

† *Ibid.* No. ccxii. p. 183.

scends in rain; and thus, by a quick circulation, this fine fluid is depurated, and successively returned for various and wonderful uses.

THE mildness of Water, though so very penetrating, is another property which it eminently possesses; for if it is reduced to the same degree of heat, and applied to the eye, or most exquisitely sensible part of the body, it excites no kind of sensation; on the contrary, so great is its lenient quality, that if applied to any nervous part, either in a painful distended, or naked excoriated state, it immediately gives some degree of ease.

HAVING thus very lightly mentioned the general properties of Water, I shall in the same manner point out the different qualities of it.

RAIN Water may be justly considered as a *Lixivium* of all the volatile bodies in the atmosphere. These are infinitely various, and produced from the exhalations of all animal and vegetable bodies in a healthy, or putrid state, on the surface of the earth, or within it, and are differently raised, either by the heat of the sun, their own heat, or artificial

ficial fires: For every chimney, like a chymical Still, raises the active volatile salts and oils of those materials, which are there prepared for our aliment. The qualities therefore of rain Water must be very different in different *Soils, Situations, and Seasons* of the year.

THE rain Water, which first falls after a long course of dry weather, in a warm season, has been always found to be more impure, and loaded with active, putrid exhalations, and insects, than that which has succeeded previous rains, especially when they have been attended with * thunder. In some parts of *Africa* † such showers are very frequent, in which the drops are of an uncommon large size, and their acrimony is so great as to erode the skin, and so putrid, that they quickly cover the cloaths they fall on with *Worms*.

THE rain Water which falls on large cities, and on the adjacent places, especially in low situations, in which the atmosphere is more heavily loaded

* Phil. Transact. No. 127, p. 652.

† Act. Lypf. Supplement, tom. i. p. 425.

with putrid exhalations, is in the general more vitiated than that which falls at a greater distance, and on higher grounds. The common rain Water, which is free from these particular noxious qualities, will not continue as long pure as spring, or pump Water, but is more apt to degenerate, and become putrid; and even in this kind of Water, which has been carefully collected, and preserved in the purest vessels, * a light cloud has been soon formed, which subsided into a fœtid *Mucus*; and from various experiments and observations of *Leuwenhoeck*, *Redi*, and others, it is evident that rain Water, especially in the spring and summer season, is more loaded with insects, and more quickly becomes putrid, than any other Water.

RAIN Water collected in high and dry situations, moderately agitated by winds, in a temperate season, and after previous rains, is more light, pure, and salutary, than any rain Water collected in a low, and different situation. Mr. *Boyle* has observed, that Water from *Snow*, and which had been collected on high mountains, particularly pos-

* Boerh. Elem. Chym. tom. ii. p. 600.

esses these qualities; but this entirely depends on the previous purity in the Water, before it was congealed into snow; for in the general, Waters from dissolved snow and ice have been condemned, on account of the impurities they usually contract from the soil in which they have lodged, especially in low situations. The purity and elasticity of the air with which Waters are impregnated, makes them more salutary and active; on this account the *German Spa* Waters, which are bottled when a south wind prevails, and the air is less elastic, are more flat, and less apt to be lively and sparkling, than when bottled when an east or north-east wind prevails, and in a clear sky.

IT is difficult to determine how far the rarefied *Elements* of Water are capable of ascending. When they are pure and separated at a greater distance, they are invisible and transparent. The *visible* clouds are formed of a greater and more close collection of them, and are more or less bright, as the exhalations which compose them are more pure and unmixed. These at a certain height, even in the hottest climates, are always *congealed*, and in that state are driven freely through the air in *distinct*

and *various* forms: But whenever they begin to *dissolve*, and fall in successive lines or drops of rain, their motion during this descent will be regularly accelerated, and their size increased, and as they gradually approach will fall into a space more narrow than that from which they descended. From hence perhaps may be explained, why a greater quantity of *Rain Water* will fall in the same space of time, in the same situation, at different heights, and that a larger quantity of Water, during that time, must necessarily be collected in a vessel placed in a *low*, than a high situation?

No place, though ever so high, hath been yet found free from the appearances of Water. * The mountains of *Carniola*, which are in height ten thousand two hundred and seventy-four geometrical feet, are always covered with snow, and on † mount *Teneriff*, which is the highest known in *Europe*, a light *Cloud* has been observed to be always suspended over its summit about noon, which soon dissolving, runs down its sides in plentiful streams. As the

* Act. Lypf. 1689, p. 552.

† Act. Lypf. 1691, p. 98.

air on such high hills is always serene, neither agitated with tempests or thunder, or vitiated with sulphureous, or putrid exhalations, this *Species* of rain Water dissolved there, or from snow collected on them, is the *purest* and lightest of any kind of Water, and has been found to possess some singular qualities : * When preserved in proper vessels, it will continue in the same unaltered state many years ; if mixed with any other less pure, a light white opacity succeeds, though each before was quite transparent. If the purest *Gold* or *Silver*, in a state of *Fusion*, was thrown into it, they quietly descend without the usual degree of hissing noise and emotion, separated, and reduced into small grains. It is not made more light and pure by *Coction*, as all other Waters generally are : Perhaps it might be more depurated by distillation, by a certain *equal, mild* degree of fire, free from any smoke, in an *elevated* air, free from any exhalations, or any dust raised in the place, and in vessels which could not communicate any *Taste* or *Smell* to it. But all these circumstances can very seldom concur, and the Water may be equally liable

* Boerh. Elem. Chym. tom. ii. p. 604.

to be vitiated, as improved by this operation. I should prefer the *certain* rules particularly recommended by *Hippocrates*, of correcting the impurities of all Waters; by previously boiling them, and afterwards receiving them into proper vessels, which he directs to be kept open for some time to imbibe the fresh air, and afterwards closed. By this preparation any insects will be destroyed, any noxious volatile parts will exhale, and the more heavy will soon subside.

THE learned Dr. *Boerhaave* in his Elements of Chemistry has, with his usually accuracy, examined and explained the different properties of Water, and from several experiments has shewn, that it is the most universal *Menstruum*, and capable (either by its own peculiar nature and penetrability, or the mixture of alkaline salts, with which the atmosphere generally abounds) of dissolving the greatest variety of bodies, such as all the simple fossil salts, all those of the animal and vegetable kind, all *sulphureous*, *resinous*, *oleaginous*, *saponaceous* bodies, and their finest parts of earth; with which last it is so intimately united, that the bulk and solid parts of all vegetables, which receive

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ceive no visible nourishment but from Water, must be owing to these solid, fine terrestrial particles dissolved in it ; which * Dr. *Hales*, and others, have, from hydrostatic experiments, fully demonstrated.

FROM hence it is very evident, that Water being capable of dissolving, and of being saturated with such a variety of bodies, will in that state be disposed to *vitiate* the animal fluids, and to *obstruct* the finer secretory and excretory canals of the human body ; but that *Rain* Water, in its purest and native state, will, from its own peculiar qualities, be the mildest, and yet most powerful, general diluent and deobstruent, of acrid and viscid humours ; and that an alteration in this dietetic part of medicinal regimen, from an impure Water to that of the purest kind, may contribute more to preserve health, and to remove several obstinate chronic diseases, than any of the boasted and short-lived specifics of modern empirics.

FROM this short view of rain Water, we may more easily determine the different qualities of the

* Vegetable Statics, ch. v. and vii.

Waters of *Springs*, *Wells*, and *Rivers*. For it is well known that all these owe their origin to the rain Water, which falls on the surface of the earth, and before it breaks out into such *Springs*, must be variously impregnated in its course with such bodies as it is capable of dissolving, or sustaining; and will be either more *vitiating*, by such additional materials, than in its former state of rain Water, or will become more *light* and *defecated* by passing through *Strata* of a different kind and texture, which rather contribute to *separate* and *deposit* any impure materials, than to supply them.

SPRINGS of the former kind generally arise from *Clayey* soils, with which many hills abound, and are to be considered as *mineral Glebes*, especially those of a blueish colour. These are impregnated with different salts, and metallic principles, which, with their finer terrestrial parts, are easily dissolved by the Water passing through their different *Strata*, which is often so saturated by them, as to appear *hard* to the taste, and incapable of dissolving any saponaceous bodies. Several of this kind being boiled, gradually form *Incrustations* of a considerable size on the sides and bottoms of tea-kettles, and vessels used for these purposes.

THE ingenious * Dr. Hales has shewn by several curious experiments, that the *Airs* generated by *Distillation*, *Fermentation*, or *Effervescence*, from animal and vegetable substances, are much inferior in quantity to those generated from their *Tartars*, which are chiefly *Concretions* separated from their fluid parts. He supposes that these concretions from spring water are of a *Tartarine* kind, as they yield by distillation such a considerable quantity of air. Among several experiments he mentions one made on three fourths of a cubic inch of an incrustation taken from a tea-kettle, in which well water had been often boiled, and which was dug below a *Stratum* of gravel into blue clay; from whence he obtained by distillation three hundred and twenty-four cubic inches of air; of which one hundred and eighty lost their elasticity in four days; and from the like quantity of a much harder incrustation of the *New River Water*, there arose in distillation two hundred and thirty-four cubes, of which, in four days, one hundred and eight lost their elasticity. From similar appearances in the distillation of the *Calculus humanus*, he is inclined to think,

* Statical Essays, Vol. ii. 231, et seq.

that the concretions formed in the *Bladder* and *Kidneys* are probably of the same kind, and that their generation may be promoted by the use of such Waters. But it is very evident from various experiments, that these incrustations from spring Waters are of a *different* nature and *Texture* from the concretions in the bladder and kidneys, and several * instances are known of such, who have constantly drank the petrifying springs, and continued free from any complaints of that kind; and of others who, under the most exact regimen, have been particularly liable to them. But however different the texture of animal concretions, and these incrustations may be, it is very certain, that all Waters of this kind will be apt to produce various disorders, not only in the first passages, by their painful irritations, but by vitiating the fluids. Several instances have been given by the best Physicians among the ancients and the moderns, of various diseases succeeding the continued use of such Waters, particularly *Indigestion*, *Colic* pains, and *Scurvy*. The Doctor very justly observes, that though the bad effects of such Waters are not often

* Vid. Reg. Ac. Sc. 91, 92.

felt by persons of strong and active habits, until their declining age, yet they deserve a greater attention in weaker constitutions, especially of the more tender sex, and of those who lead a sedentary life.

BUT the spring Water which passes through gravelly *Strata*, is very different from the former; for these small sands are generally of a *Crystal* or *flinty* kind, and of such a various and irregular *Figure*, that no two particles can be so *equally* joined, as not to leave some small interstice between them; and from their firm texture, the Water in its course through them is less capable of dissolving any considerable quantity of new materials, but by being *filtrated* through these exquisitely fine strainers, separates and deposits whatever noxious and heterogeneous particles were mixed with it, and rises more transparent, light, and depurated. Springs of this kind approach nearer than any other to the nature of that Water which is obtained from the snow, collected or dissolved on the highest mountains.

DOCTOR *Hales* enumerates several springs in *England*, which may be justly ranged in this superior class, which separate no tartarine incrustations on the sides, or bottom of the vessels, in which they have been boiled. Such is the Water, which is conveyed in a pipe at *Hodsdon* in *Hertfordshire*, which passes through a gravelly soil, and boils up through a fine white sand, which gave no incrustations to a boiler, which had been used for fifteen years. Such likewise is the Water which supplies his majesty's palace at *Hampton*, and that on *Haverling Hill* in *Essex*, where the ancient royal bower stood, which deposited no incrustation in a coffee-house boiler, that had been in constant use for fourteen years. The same purity is found in the springs near Mr. *Harvey's* seat at *Comb*, at *North Homes*, and in *Old Park*, which supplied the dean and prebendaries, and other inhabitants in *Canterbury*. All these Waters arise from gravelly hills, and are from thence conveyed in leaden pipes. The Doctor observes, that though *Hippocrates* condemns the Water that is carried far in pipes of lead, yet three of these, which are carried from a considerable distance, and that at *Hampton Court* about two miles, have

have no incrusting or bad quality. But however the caution given, and observation made by *Hippocrates*, on Waters in general, is very just; they are often impregnated with various salts, and chiefly of the acid kind, which will then become a *Menstruum* capable of dissolving lead, and of producing very pernicious effects. Doctor *Tronchin* gives a very remarkable instance of an endemic *Colica Pictonum*, succeeded by a *Paralysis*, which in his time prevailed in *Amsterdam*, particularly about the autumnal season. In this city rows of trees are planted in almost every street, and the roofs are flat, and covered with lead; and the rain Water falling on them, is thence conveyed in leaden pipes, which is carefully preserved for use, and preferred to their common Water; but the leaves, which particularly at that season of the year are blown off the trees in large quantities, and settle on the tops of the houses, retard the current of the rain Water into the pipes, and this by longer stagnating there, is soon impregnated with the acid qualities of the leaves, and becomes a *Menstruum* easily capable of dissolving lead. The Doctor directed that a lattice network covering should be raised over the roof, which by sustaining the leaves, and yet giving a quick passage

fage to the Water, may prevent this solution; but the most effectual method was to avoid drinking it during that season.

WELLS or *Pump Waters*, are equally with those of springs, either improved or vitiated by the nature of the soil through which the rain Water passes; with this difference, that they not only arise from the *Bottom*, but from the different *Strata* on the *Sides* of deep wells; and by longer stagnating, are more apt to be loaded, than such which pass off in more continued currents; but in general the pump Waters from gravelly soils are very little different from springs of the same kind.

RIVER Waters which arise from collected springs, partake of their original source, and are further *improved* or *vitiated* in their course by the materials which they *receive*, or deposite; with this difference, that they are constantly exposed to *Rains*, and to the different *Exhalations* in the atmosphere, and are much more altered by the infinite variety of animal and vegetable materials thrown into them, especially in their passage through *large Cities*, which render them liable to different degrees of *Putrefaction*

tion and Fermentation. Such changes have been often observed in the *Thames Water* *, which after being carried to sea, and into a warmer climate, has in the space of eight days acquired an intolerable degree of putrefaction; but when brought as far as *Virginia*, and the casks were opened, though the water had then an active fetid smell and taste, yet after resting some time, it became perfectly sweet. † At other times, when this Water has passed through a greater previous degree of Fermentation and Putrefaction, by being carried to a more hot and distant climate, a spirituous vapour was emitted from the casks when first opened, like that from vinous liquors, which quickly caught the flame of a lighted candle; but this water still retained an active smell and taste, which entirely ceased after resting some time, and the admission of fresh air.

It has been frequently observed, that this Water, though drank freely in this advanced, putrid state, has not been attended with, or succeeded by any

* Phil. Transact. No. 127, p. 652.

† Phil. Transf. No. 208, p. 838.

bad effects ; for putrefaction is a real *depuratory* process, succeeded by great and useful changes in such impure bodies, which are susceptible of it, by *forming* and producing a *volatile Antiseptic* salt, which did not *originally* exist in them, but is of a quite opposite nature to putrefaction, and changes them into a different and salutary state : The learned Sir *John Pringle* has fully evinced this by several accurate experiments and judicious observations on them. May not the *gradual* abatement, and sometimes the *quick* cessation of a malignant epidemic *Small-Pox*, and of other contagious diseases, arising from the exhalations of animal bodies in that state, and in an *Air* much *confined*, or of such which arise from a warm, moist, and consequently putrescent constitution of air, when not agitated by any winds, be, in some measure, owing to a conflict of such putrid bodies, somewhat analogous to the process of putrefaction, and productive of the same salutary effects in the air ? And may not *local artificial* exhalations of such *volatile Antiseptic* salts in that state of the air, more directly and powerfully contribute to correct and alter it, than any other antiseptic vapour ? It is likewise very remarkable, that the vapours which arise from bodies
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when in the first stage of putrefaction, are horridly fetid and noxious, and in that state have not yet produced those kind of volatile salts with which in its farther progress they abound, and then emit a very *pungent urinous* smell, of a very different nature from the former.

From hence it appears, that *River Waters* are in the general more liable to impurities, than those of springs and wells; but that such as have passed in quick currents through a gravelly bed, will be rather more depurated, than loaded or vitiated by them.

It is very remarkable, that though these several Waters are so different in their nature and qualities, yet in the general they differ very little in their weight. Doctor *Hales* observes, that by evaporating thirty-four inches of common rain Water, carefully collected, and the same quantity of the pure *Comb Water*, he found the weight of the sediment equally the same, viz. two grains; which is in proportion to the weight of the whole, as 1 to 4445; and from repeated experiments Mr. *Boyle* found, that the difference in weights of rain, river,

and spring Waters, was scarce the one thousandth part of the whole. However, some particular Waters are much more heavy and impure. * *Frederick Hoffman*, by several curious experiments with an hydrostatic instrument, found that the increasing difference from the purest of such Waters, to that of turbid, stagnating ditch Water, was from one to seven lines in the scale, which is nearly the same as was estimated by Mr. *Boyle*, viz. 252, 256, 260 grains, which in the extreme is that of eight grains.

FROM hence it is evident, that nothing universally true can be determined from the *Weight* of *Waters*, whose contents, in respect of their gravity, bear so small proportion to the whole, and are so little different; and in which the most active parts are often specifically lighter than those of Water: On which account the *lightest* natural Water is specifically heavier than the same quantity of any *Wine*, as the spirituous parts of this are always lighter than those of Water. The principal *difference* between Waters must therefore depend on

* Vide Exercitationes Physic. Chemic.

other qualities, which are various, and can only be determined by experience and observation, and by a more cautious and different investigation of them than what can be deduced from their sensible weight. The sensation which succeeds the use of Water, being either light or heavy, is certainly more owing to the grateful or disagreeable impression on the nerves of the stomach, or to other qualities in the Waters, than to their real *Weight*; on which account the Ancients called such Waters *crude*, and indigestible, in opposition to such as passed more freely, and were more grateful to the stomach.

FROM hence we may form a more clear judgment of the qualities of different Waters, and how far they may be naturally improved or vitiated, or by art may be rendered more pure and salutary. This depuration will certainly be greatly promoted, if not more easily and effectually obtained by a previous coction of them, in the manner * I have before mentioned, than by any other means.

It is surprizing that this precept so evidently useful, and so universally recommended and observed

* Vide p. 136.

by the Ancients, should have been so generally neglected. They not only conveyed the best Waters of rivers and springs, from a great distance, through magnificent *Aqueducts* for public uses, but often directed them to the *Thermopolia*, where by receiving different degrees of heat, they were depurated in a more elegant and exquisite manner.

FROM these principles, the *medicated* qualities of Waters, both *cold* and *hot*, may be more clearly explained. The operation of *purging* Waters, of the former kind, are more evidently owing to the more considerable real *Weight*, and quantity of irritating saline bodies dissolved in them. Doctor * *Hales* found, that after the evaporation of a half pound of *Havering* purging well Water, there remained twenty-four grains and a half of sediment, which is in the proportion of 1 to 143. From a half pound of *Acton* Water there remained twenty-two grains of a very *white Salt*, which is as 1 to 106. From an evaporation of thirty-four cubic inches of *Scarborough* Water, there remained forty-eight grains of sediment, which is in the propor-

* Statical Essays, Vol. ii. 241.

tion of 1 to 185; and yet from the evaporation of thirty-four cubic inches of the light *Comb* Water, as mentioned before by Doctor *Hales*, the remaining sediment was only two grains, which is in the proportion of 1 to 4445. But though the difference in the weight between this pure Water, and those loaded purging Waters, is so considerable, yet from thence alone the effects produced from different Waters of this kind cannot with certainty be determined; and in the *Scarborough* Waters particularly, the light chalybeat qualities are soon entirely lost.

SEVERAL ingenious physicians, by experiments properly adapted to *cold* medicated springs, have been more successful in discovering their *fixed* and more *evident Contents*, and investigating their qualities, than those of the *hot* mineral waters, which are entirely *volatile*, more *latent* and *minute*. As the experiments which have been hitherto applied to these, to ascertain their *true Principles*, have not only been ineffectual, but rather contributed to *destroy* and *dissipate*, than to *produce* them, I shall in the following chapter endeavour to point out
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the *original Principles* and *Qualities* with which the *Bath Waters* in *Somersetshire* are *impregnated*, and which, from my residence there, have more particularly engaged my attention.

CHAP.

C H A P. X.

On the Principles and Qualities of Bath Waters.

FROM several evident appearances, most of the writers on this subject have, in the general, agreed in assigning *sulphureous* and *ferugineous* qualities to these Waters; and, from experiments made on these minerals in their natural, *combined* state, have endeavoured to assign the principles and qualities of these Waters; but the changes made in them by such experiments in their combined state, are very *different* from those which are produced by the *slow* and *mild* operations, by which their *Texture* is gradually *decomposed* in their *Strata*, within the bowels of the earth, and by which their
latent,

latent, but *real* principles are then *disengaged*; for several mineral *Compositions*, which in that state reject any *Union* with Water, when *decomposed* will easily *unite* with it, and become capable of impregnating it with their original principles.

FROM a neglect of this *material* distinction, and from assigning particular qualities to Waters, from experiments made on such *Minerals* in their *concrete* state, several useless *Disputes* and errors have arisen. These likewise have been increased, and more perplexed, by attempting to discover the real qualities of these Waters, when their original principles were *decomposed* and *dissolved* in them, by *ineffectual* experiments, not *adapted* to them, viz. *precipitations*, various *Mixtures*, *evaporations*, and *chemical analyses*; whereas their active and volatile principles not only elude such gross enquiries, but are more quickly *lost* and *dissipated* by the very means they used to discover them, while they seek for them in vain, by examining the gross *subsiding Materials*.

It has been asserted, and indeed fully proved, that no *Sulphur* exists in these Waters; and it is

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very certain that *Sulphur in its concrete form*, which is a compound of a certain proportion of any *pure inflammable Oil*, and the *vitriolic acid*, is in that state absolutely *incapable* of contracting any *Union* with Water; and the combination of these principles is so *strong*, that when it is * sublimed by a considerable force of fire into soft *Tufts* or *Flowers*, they do not suffer any *Decomposition*, and still retain all the properties of *Sulphur*.

To form therefore a more exact judgment of the nature and qualities of *Sulphur* in a *combined* state, and when *decomposed*, and its principles *separated* and *disengaged*, it will be necessary to take a short view of those *processes* by which it has been decomposed, and the different appearances which it exhibits in its progress to a *Disunion*. From whence we may likewise more easily discern, how far Water may *be impregnated* with its principles, and capable of *retaining* them.

SULPHUR is often found native in a concrete form in mines, and other mineral *Strata*; sometimes of

* Vide Boerh. Op. Chem. Proc. cl. tom. i.

a yellow and red colour, transparent as amber, but most frequently of an ash colour, and opaque. But the large quantity with which we are supplied, is artificially extracted from other substances, with which it is mixed, and particularly from the mineral *Pyrites*, by the well known process of sublimation : The *Germans* and *Italians* have large works formed for separating and collecting it with less expence, and in greater quantities.

THE properties of *Sulphur* are very singular. † It melts, when heated to a certain degree, and returns, when cold, to its former condition. When in this state of *Fusion*, it is exposed to the free admission of the air, it quickly *takes Fire*, and emits a blueish flame, whose vapours, when inspired in their full force, are highly fatal and suffocating ; and this *Deflagration* will continue until the whole evaporates : But if *Sulphur* is kept in a state of *Fusion* without *catching Flame*, it will emit vapours of an active penetrating, but not suffocating kind, but more mild, and somewhat *aromatic* ; and if it

† Vide Boerh. Op. Chem. Proc. cxix. tom. i.

is continued in this *Fusion*, though without taking flame, the whole quantity will likewise gradually evaporate.

BUT when the intention of the chymist is to decompose sulphur, and to separate and collect the *heavy, acid Spirit*, a very different * process from the former is necessary, which not only keeps the *Sulphur* in *Fusion*, but in *Flame*, and continued for a longer time. By this intense heat, vapours are at length *slowly* raised, which formed into drops on the sides of the glass bell, placed over them, are received in a vessel properly contrived for that purpose. This liquor is gratefully acid, of a yellow colour, sometimes red, and of so *fixed* a nature, that a considerable degree of fire is necessary to raise it.

HENCE it is evident, that the vapours which exhale from sulphur in *Fusion*, and not in *Flame*, are of a milder nature, and longer retain their sulphureous *mixed* qualities, until the *light, oleaginous, inflammable* part is separated from the *volatile Acid*;

* Vide Boerh. Op. Chem. Proc. cli.

but while that *Union* remains, they constitute what * *Maquer*, not improperly, distinguishes by the name of *volatile Spirit* of *Sulphur*; and that this is a *real Compound* is very evident; for whenever the *vitriolic acid* comes to a close contact with any substance containing the pure *oily principle*, or what is called the *Phlogiston*, (provided this is opened and disengaged to a certain degree) a *volatile Spirit* of *Sulphur* is infallibly and immediately generated. However, this *Union* and *Decomposition* of this *volatile Spirit* of *Sulphur* appears to be very *different* from that which prevailed in the *concrete Sulphur*, which was much more firm, and required a very *great Degree* of heat to separate them; whereas their *Union* in this *volatile Spirit* is so *light*, that it is soon dissolved and separated in the air.

THERE are various kinds of *sulphureous Waters*; but as my intention in this chapter is only to point out the real principles and qualities of the *Bath*

* Ce que prouve, que l'esprit sulphureux volatil est composé comme nous l'avons dit; c'est que toutes les fois que l'acide vitriolique substance qui contient du phlogiston, pourvu qu'il soit développé jusques à un certain point, il ne manque pas de se produire sur le champ de l'esprit sulphureux. El. Chem. tom. i. p. 48.

Waters.

Waters in Somersetshire, which are not only sulphureous, but contain another very material Principle from *Iron*, I shall chiefly dwell on such experiments and observations, as are more particularly relative to them.

THE yellow *Pyrites* is a mineral consisting of *Sulphur*, *Iron*, and unmetallic *Earth*. The sulphur, which is the only volatile principle, generally makes a third, or fourth part, of the whole weight: The proportion of iron is more various, but is often nearly equal to that of the *Sulphur*.

THE mutual action of *Iron* and *Sulphur* on each other are well known by several experiments. * If equal parts of the filings of iron and sulphur, are, by a continued triture in a glass mortar, mixed together, they will at length grow *hot*, and emit a sulphureous smell, and the acid of the *Sulphur* will be so far disengaged, as to be capable of *dissolving* some parts of the *Iron*, and of communicating their qualities to Water: But if you mix equal quantities of them, and *moisten* them in such

* Vide Boerh. Operat. Chem. Procef. clxx.

a manner, as to form them into a sort of *Paste*, and *compress* this mass closely in an earthen vessel, it will, in a short time, spontaneously begin to acquire a *gradually* increasing degree of heat, emit *sulphureous Vapours*, and at length break out into a *Flame*.

SEVERAL writers, observing the effects produced from the mixture of *Sulphur* and *Iron*, have justly concluded, that some of the hot Waters called sulphureous, and particularly those of *Bath* in *Somersetshire*, owe their peculiar qualities to the *yellow Pyrites*, which undoubtedly abounds in the deep recesses of the high hills, which surround that city; and several small fragments of them are found in the soil surrounding the pumps, and in the muddy sediment of these Waters, which are probably conveyed there from a considerable distance, by the strong current of these springs.

BUT though the mutual action of *Iron* and *Sulphur* on each other when they come into contact, and the decomposition of sulphur into a more *fixed acid*, and a volatile spirit of sulphur, are more evident from these experiments, yet the *natural Process*,

cess, and slow gradual decomposition and *Changes* made in these *Minerals*, in the bowels of the *Earth*, are very *different* from those produced by the experiments in the former processes, and the true nature and qualities of these Waters, when impregnated with them, are likewise very different from those which have been usually ascribed to them, from the *Experiments* made on these minerals, either in a *combined* state, or when they are *decomposed* and *dissolved* in *Water*.

THE ingenious M. *Maquer* has enlarged the true established principles of chemistry, by several new and accurate experiments and observations on them, and has more clearly pointed out the *true* nature and *Qualities* of the *volatile Spirit* of sulphur, than any of his predecessors. He mentions a particular way of more slowly decomposing *Sulphur* and *Iron* in the yellow *Pyrites*, without the aid of any fire; for if they are collected in a sufficient quantity, and exposed to the *moist* air, they will in the course of time begin to *effloresce*, and shoot out into *Flowers*, which certainly proceeds from a more *slow Accension*, and *Decomposition* of the *Principles* of *Sulphur*.

THIS

THIS *slow* efflorescence of the yellow *Pyrites*, and the more quick and greater emission of sulphureous vapours, when they approach nearer to a *mutual Contact*, are *Phænomena* well worth our notice, as they depend on a *singular* property, which iron possesses, of decomposing *Sulphur*, by the help of *Moisture*; and seem to point out more clearly the *true Principles* of the *Bath Waters*, and the *natural Process*, by which these successive changes are more *slowly* and *equally* made in these minerals, in the bowels of the earth, while they approach and come nearer to a *mutual Contact*, and communicate their principles and qualities to the Waters passing through them.

HENCE it appears that these Waters, when thus impregnated, may be justly called *Sulphureous*, and contain the real principles of *Sulphur*, *decomposed* and *dissolved* in them. This is *evident* from the large quantities of the finest *Sulphur*, which are found on the *Bolt Head* over the spring, and in the aqueducts of the *Aix-la-Chapelle* Waters. These sulphureous *Vapours*, which contain the *volatile Principles* of *Sulphur* lightly united, would soon separate, and be dissipated in the air; but by being
retained

QUALITIES OF BATH WATERS. 217

retained and *collected* there, and gradually approaching to a more close *Contact*, *re-assume* their pristine *Form* and *Qualities*. I dont find that any experiments of this kind have yet been made on the Waters of *Bath*, where there are neither any regular aquæducts, or *Bolt Head*, to collect and retain the vapours arising from them; but it seems more than probable, that quantities of the finest sulphur might be collected there, and preserved in the same manner *.

Do not the *Principles* of sulphur, with which the *Bath* Waters are *impregnated*, consist of the *purest*, *volatile*, *oleaginous Phlogiston*, lightly united with the volatile acid spirit of sulphur, whose real properties are not *altered* by too great a degree of *Heat* or fire, but which acquire a greater *activity* in a more mild and *dissolved* state? And will not

* I communicated my sentiments on this subject, several years ago, to an ingenious physician residing at Bath; and as there were neither any pipes to convey the Water, or *Bolt Head* to *retain* the vapours arising from them, he proposed, at my request, to direct some contrivance of that kind, when the ground was next opened, to cleanse the pump; but this was probably prevented by some difficulty attending it. However, I have received information, that some real sulphur has since been found in crevices near the water.

their union continue more permanent in *Water*, whose *Density* is much greater than that of *Air*, especially in subterraneous springs, where the admission of air is less *free*, and more *confined*? And does not this appear fully evident, as these vapours, when *reunited* and *collected*, acquire and retain all the *Properties* of the finest *concrete* sulphur?

BOERHAAVE is the first who has observed, and clearly proved, that there is in iron an *inherent Principle*, of a *distinct* nature from the other parts of iron. He has given a * process, by which it may be entirely separated from the *recent* filings of *Iron*, which have not contracted any rust. The *Menstruum* which he has found most proper for this purpose, is the *strongest* and most generous *Old Hock*; and the degree of heat in which they are macerated, is more *mild* and *equal*, than that which has been usually applied in making the *chalybeate Wine* in different dispensatories. He describes the *peculiar Taste*, and *sensible* qualities of this Wine, and, to confirm this observation, he † repeats the

* Vide Procef. clxvii. Operat. Chem.

† Residuo eodem modo, novum Vinum affundatur, prodibit quidem ferratum Vinum, at nullo modo conferendum præcedenti: brevi enim singulare id ferro deest. Est tincturæ non solutionis species.

same process on the remaining filings of iron, after the former Wine has been strained off from them; by which indeed a Wine is produced strongly impregnated with its *Iron* qualities, but entirely deprived of this *active peculiar Principle*.

* He assigns very peculiar qualities and virtues to this kind of *chalybeate* Wine, which he chiefly imputes to this *singular animating* principle, and which in his private lectures, I have heard him more freely distinguish by the name of *Anima Martis*. He says, that from his own experience he has found that the efficacy of it, in restoring the *relaxed* and *languid* state of the *Solids*, and in giving a more *firm Union* and strength to inactive dissolved fluids, has been more powerful, than he could obtain from any other medicine, or regimen of diet †.

* Apparet hinc esse in ferro *partem*, in hoc leni, acido, fermentato, oleoso, vegetabili, solubilem: *Alteram* quæ non soluta manet in eodem: Prior pars, est summum remedium *mibi* hæcenus *notum*, cognitum in arte, ad instaurandum vim hæmapoieticam corpori humano; quoties hæc *sola* ex debilitate nimis laxorum solidorum, et humorum nimis levi, aquosa, frigida, inertis indole oritur. Ib. P. 445.

† Neque enim ulla rei vegetabilis, animalisve virtute, ulla victus ratione, id quis efficiet in casu dicto, quod hoc Marte conficitur. Ib.

I MUST here observe, that *Boerhaave*, in his private practice, more frequently directed a chalybeate Wine with the same intention, but prepared in a more mild, and less continued heat, in which some aromatics were likewise infused. The form which was most familiar to him, and which I have generally used, is here added *. He usually directed, that the phial, or bottle, should be kept at a moderate distance from a fire, three or four days, shaking it often, and then to be removed to a *cold, quiet* situation, and the bottle well corked, but without straining the Wine from the ingredients, but when the quantity was taken, which had been directed; the *Cinnamom* and *Magellanic* bark, which are in a greater proportion to that of the filings of iron, renders it more light and grateful to the stomach, which is very apt to reject the usual preparations of this kind, more strongly impregnated with the iron qualities. He has given a preparation of this kind in his † *Materia Medica*, which

* R. Limatur ferri recent. uncias duas.

Corticis Cinnamom.

Magellanic. āā sesqui unciam.

Macerentur spatio trium dierum in Vino optimo Rhenani lib. iii. et coletur tantum tempore uss.

† Sect. 1250, p. 225.

he recommends to strengthen and animate a relaxed dropfical constitution, when difengaged from the load which diftended the veffels; to which he has added *Rhubarb*, and an equal quantity of the *Peruvian* and *Magellanic* bark, instead of the *Cinamom*. He directs thefe lighter chalybeate Wines in a much larger dofe than that which is made by the former, which, he fays *, is very effectual in the quantity of a dram; whereas he directs this lighter preparation in the quantity of a half ounce to two ounces, once, twice, or three times in a day, when the ftomach is moft empty.

THE early confidence I placed in the extenfive knowledge and candour of this eminent phyfician, has been confirmed by a long courfe of practice; in which time I have often found this chalybeate Wine particularly ufeul in fuch chronic cafes, when the *Viscera* were *found*; and when the *Vis Vitæ*, either from the ftate of the folids or fluids, was not too great. It requires the judgment of a real phyfician to direct it properly: It will answer more

* Si hujus Vini ferrati drachma, triplo facchari ad confiftentiam cocti mifcetur certaue lege in cafu idoneo propinatur auxilium adfert pueris virginibufque incomparabile profus. Ib. p. 446.

safely and effectually when taken first in a moderate quantity, very gradually increasing and persevering in the use of it, than in a larger quantity, and less constantly pursued. Previous mild evacuations, suited to the strength of the constitution, are generally necessary; and I have found it absolutely necessary, during the course of this medicine, to omit the use of it, when the stomach or bowels have been affected, until by a light *Emetic*, or mild *stomachic Purgative*, they have been disengaged.

WHATEVER degree of heat is sufficient to separate this principle by its proper *Menstruum*, is certainly to be preferred to any *greater* heat, which may be more apt to dissipate it. Is it not very probable, from the *Analogy* which *Boerhaave* assigns to the * *Qualities* of this *Menstruum*, and those which the *oleaginous*, *acid*, and *volatile Spirit* of *Sulphur* possesses, that the chalybeate *Principle*, which chiefly prevails in the *Bath Waters*, is of the same *singular* kind, to which he assigns these *peculiar Virtues*? And are they not more safe and effectual,

* *Lene acidum spirituosum, oleosum,*

than

than if they were more sensibly and strongly impregnated with the other qualities of iron ?

Is not the *chalybeate Principle*, dissolved in these Waters, though in a very moderate quantity, of a more *light* and *active animating* nature, than any other which is *artificially* extracted from that mineral, by the *usual Menstruums* directed to that purpose ? Or which can be possibly separated from it, by the natural juices of the stomach and bowels, when taken in any solid form ?

ARE not the Waters of *Bath* solely impregnated with the principles of *Sulphur*, and this *chalybeate Principle*, *decomposed* by this natural process ? And are they not thus mutually exerting their powers, more capable of animating a languid *nervous* system, and of safely *pervading* the *distant* and more *minute* vessels of the body, than any other *artificial* preparation of these minerals, or any such *Combination* of them yet known in any *other sulphureous Waters* ? And is not the quick, grateful sensation, and relief, which is frequently received immediately after they are taken into the stomach, owing to these animating and volatile principles ?

ARE not the most obstinate *chronic* diseases, owing to *Obstructions* in the more minute and *distant* vessels of the animal system, to which no medicines can arrive, but such which by their *Activity*, are capable of enlarging the circulation of the fluids, and by the *Minuteness* of their parts, of *pervading* and *disengaging* the obstructed vessels?

Is not the surprising efficacy and operation of some alterative medicines, chiefly owing to the activity of their *lightest* and most *imperceptible* parts? This seems more evident, from the powerful effects of the *antimonial emetic* Wine, whose active metallic parts, dissolved in it, are so very light, that the *regaline* cup, which impregnates the Wine, after being used for a considerable time, is very little diminished of any sensible *Weight*; and the oriental *Musk* will soon diffuse a continued, extensive fragrance, without losing any sensible part of its weight. This surprising efficacy of the most *minute* parts of bodies, may be confirmed, and illustrated by many other instances, and deserves more notice than has been generally given to it, in the preparation of several *alterative* medicines.

ARE

ARE not these Waters particularly proper to enlarge *equally* the circulation of the fluids, to attenuate and correct the *viscidities* and *acrimony* of them, and to promote the natural *excretions* and *secretions*, which are always *deficient* in *low, languid* constitutions ?

ARE they not always more effectual when they promote *perspiration*, which is the most important *discharge* of the body, and on which the *regularity* of the others entirely depends ? And should not the regimen and manner of drinking them be particularly directed with that intention ?

WILL not their efficacy be greater, when the whole quantity directed by the physician, is taken in *successive* draughts, at a *due distance*, in the morning, when the *Stomach* and *Bowels* are most free, and the whole *System* of vessels is most disengaged, than in *divided* draughts, at a *greater distance*, or after any previous meal ? For in the former state of the body, they will more quickly and unmixed be received into the blood ; and from their regular *successive* supplies, be more *equally* and effectually diffused through the whole vascular system, with-

out any *partial* plenitude, and be more capable of pervading the more distant vessels, than when taken at *greater*, and more *unequal* distances, when the effect from the former glass becomes *languid*, unless supported by a seasonable *supply* ?

THE erroneous attention too frequently paid to their passing by *Urine*, and to medicines directed for that purpose, must arise from the very great quantity in which these Waters were improperly directed in *former* times, and in which the foreign mineral Waters were, and are still taken, though in a less extraordinary degree : For in such a general state of *plenitude*, an increased discharge of *Urine* was absolutely *necessary*, to prevent a *rupture* of some vessels : But whenever these Waters are taken in moderate quantities, and pass off frequently by urine, which often happens in weak irritable constitutions, they never will produce any lasting good effect, until by a proper regimen they are capable of passing farther into the more distant vessels of the body.

FROM hence it appears, how ineffectual any gross experiments on *concrete Sulphur*, or *Chemical analyses*,

lyses, evaporations, precipitating mixtures, and trifling observations on the nature and figure of their *subsiding Contents* must have been, in discovering the true principles of these Waters; and how precarious any rules of practice must prove, which are deduced from such experiments and observations.

As the Wines of the Ancients were usually mixed with Water, and greatly improved or vitiated by the qualities of it, I thought it necessary to make some general observations on the properties of Water, and how their different qualities may depend on more *minute* and *latent* causes, than can be deduced from their different *specific Gravity*, or any appearances in their subsiding contents. This insensibly hath carried me into this digression (though not quite foreign to my subject) on the nature of *Bath Waters*, and tempted me to throw out some observations, which have often engaged my attention; but very far from presuming in this imperfect sketch, to have fully investigated the true nature and use of them, but rather with a view of exciting others, who have more leisure and abilities, by future experiments, to improve them. The farther knowledge of their real qualities can be acquired

only by experiments suited to the nature of them, and by investigating from these appearances their real origin, and the changes made in them; but experience and careful observations on their effects when taken, must determine how far they may be useful or prejudicial, in different diseases and constitutions.

It is not my intention to enter into the *extensive* virtues of warm bathing in these waters; they well deserve a particular treatise. I have lightly dwelt on some circumstances relating to it in another chapter, and here shall only make a few general observations.

THE peculiar active principle with which the *Bath Waters* are impregnated, renders them much more powerful than baths of common Water. Hence the surprising effects in quickly removing several diseases, where the most judicious regimen of medicine and diet have failed; but these very qualities render *improper* bathing in them equally prejudicial.

THE heat of the bath, the quantity of Water, and the time of continuing in it, must be adapted

to

to different constitutions. The strength and motion of the heart ought to be equal, or rather superior to the heat, and weight of the bath. The instant the pulse continues to be more weak and languid, the bathing has been carried too far, and must prove more prejudicial than useful. But nothing is more necessary to make warm bathing safe and effectual, than moderate, previous exercise, which equally strengthens and enlarges the motion of the blood, and brings it to a proper temper with the bath. On which account, I usually prefer the new *Kingston* single baths, generally reduced to a more temperate heat, to the old larger baths, and direct going into it about two hours before dinner, when after an early breakfast, and the moderate exercise of the morning, the *moving* powers of the body are more free and active, than at any other time of the day, the vessels more disengaged from any superfluous load and plenitude, and more capable of bearing any additional pressure on them. This kind of bathing will, or ought to be succeeded with more lightness, and a greater freedom of spirits than before; and nothing is a more sure test of its having been judiciously advised, and prudently conducted.

How

How different from this regimen is being carried out early in the morning, often in a cold moist air, in a close confined vehicle, in a heavy bathing dress, and after returning from a large, promiscuous hot bath, either going into bed, or continuing a considerable time in a more warm situation ! I have often observed some persons after such a relaxing exercise, languid and low for some succeeding days ; and others, of more delicate and irritable fibres, to continue feverish all that day, and frequently longer.

THESE inconveniences chiefly arise from the nature and structure of the great baths, and the neglect of taking the proper advice of a physician ; for many here, however unqualified, give directions about bathing, which rather requires more judgment and attention to render it salutary, than drinking the Waters. The late ingenious Dr. *Oliver* has made several observations on the effects of improper bathing. Yet more attention has been given to the elegance of the public rooms, than to the structure and convenience of the old public baths. These and more exact rules of bathing, are among the *Desiderata* still wanting at Bath.

HIPPOCRATES

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* HIPPOCRATES was the first who directed warm bathing with a medical intention, in the cure of several diseases; and yet it is surprising with what minute exactness and care he directs it in some, and forbids it in other diseases. The baths he used were not hot, but rather tepid. The same unvaried degree of heat, or quantity of Water, was not used, and he seems to lay a particular stress on judiciously varying the heat of the bath during the time of bathing, which he calls *μετακρᾶσμα* †.

* De Acut. Vict. Vid. Charter. Edit. tom. xi. a p. 106 ad 111.

† Το μετακρᾶσμα πολυήμιον. Ib. p. 123, text. 44.

C H A P. XI.

On the convivial Entertainments of the Ancients.

THIS History of the Wines of the Ancients, the previous preparations of them, and the peculiar qualities of their principal Wines, will appear in a more clear light, by taking a view of the customs and manners observed by them in their convivial entertainments, especially in that period of time, when the arts and sciences flourished at *Athens* and *Rome*, when the Wines were made with the greatest skill, when the use of them more generally prevailed, and their taste was most correct.

WE have several passages among the Historians, Physicians, and Poets, relating to this subject; but
Plato,

Plato, Xenophon, Plutarch, and Athenæus, have more particularly treated it in their *Symposia*. The persons introduced by them as the principal guests, were the most eminent in that age for their dignity and learning; the most elegant and regular order was observed at their tables; Wine animated the conversation; and among other topics and customs, the various manner of preparing and drinking their different Wines is more exactly described.

SEVERAL authors among the moderns have composed particular treatises on this subject; but whoever has perused them, must have observed, that while his mind has been often pleased and informed by many learned and just observations, it has been as frequently perplexed by their different opinions, and tedious disputes, not only about material circumstances, but trifles.

NEITHER is this subject undeserving the attention of those, who are desirous of forming a more true judgment of the description given by physicians of the diseases which have generally prevailed in different periods of time, and the rules of practice which they have directed; for these appearances,

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and

and the constitution of the inhabitants, are as much varied by their different manner of *Eating* and *Drinking*, as by the *Soil*, *Situation*, and *Climate*.

As this subject is very copious, I shall endeavour to reduce the most material circumstances within a small compass, and dwell chiefly on such, which still remain obscure, or may contribute to illustrate the nature of these Wines, and the manner of drinking them in their convivial entertainments, in which they were always considered as a principal article, even when the whole *Apparatus* which attended them, was most elegant or magnificent. The *Romans*, in a great measure, derived their customs and manners from the *Greeks*; but I shall occasionally take notice of any material difference between them.

It was an usual custom among the *Greeks* and *Romans* to make their supper the only or principal meal, though several varied from this rule. *Hippocrates* prefers divided meals to a single meal, which he calls *Μονοσίτην*, and confirms his opinion * by

* *Περί διαίτης βίαιων τριών και οξείων νοσημάτων.*

several

several useful observations. Persons of a strong constitution, and engaged in much labour and exercise, require certainly large supplies; but from this great and habitual *Dysentia* of the stomach by a single meal, and its *pressure* on the adjacent *Viscera*, they must in the course of time become more liable to chronic complaints. It must be equally, but more quickly prejudicial to those of a weak constitution, who are neither able to *take*, or to *digest* such a quantity of nourishment in a single meal, as will be sufficient to supply the *Wastes* of the body, and more *equally* to support their strength and spirits for twenty-four hours.

We find therefore, that in the most early ages, and particularly in that of *Homer*, the names of *Breakfast*, *Dinner*, and *Supper**, are often mentioned †. *Plutarch* has fully discussed this question, and explained the intention expressed by those different names. He observes, that persons of a strong constitution, who rose early, and were engaged in the laborious and active scenes of life, took usually for breakfast a piece of bread dipt in

* *Αρραίσμα, Αριστον, Κεντρον.*

† In Lib. viii. *Sympos. Quæst. vi.*

pure Wine, which on that account was called *Ακραίσμα*, or if they omitted breakfast, took somewhat of the same kind for dinner; which by them had formerly been used equally to express breakfast or dinner, though they usually took only one of them, besides the principal meal; and *Eustatbius* says, that there is no instance in *Homer* of the same person, who, besides the principal meal, eat more than a single repast. *Athenæus* says, that in his time most persons at *Rome* eat regularly three times; valetudinarians and children are not included in these general customs, and must have always required repeated supplies: However all agree, that the previous meals of breakfast or dinner were usually taken more *sparingly* and *alone*, that they may eat more *freely* at supper, and enjoy the *Society* of their friends.

THE dinner therefore was regarded by healthy and temperate persons rather as a refreshment than a meal, or nourishment, and to prevent any uneasy sensation in the stomach from fasting. Thus *Horace* used to dine *. It is more particularly de-

* *Præsum non avide, quantum interpellat inani
Ventre diem durare.* Sat. 6. lib. i.

scribed by others *, and consisted chiefly of some light repast, without any animal food or Wine; on which account it was called by some † *Prandium caninum*, as dogs abhor the taste of Wine. ‡ *Plato* blames the *Syracusans*; and § *Cicero* the *Romans*, who dined, and supped freely the same day.

In the early times of the commonwealth, the ninth hour was appointed for their principal meal, or supper. || *Martial*, in an elegant correct epi-

* Hyeme si prandeat aliquis, utilius est exiguum, quidem, et sine carne, et potione fumere. Famem facilius fert adolescens quam puer, et uno cibo, quam prandio auctus. Panis et sine mensa prandium, post quod non sunt lavandæ manus. *SENEC. Ep. lxxxiii. ad Lucil.* De prandio nihil detrahi potest; paratum fuit non magis hora, nunquam sine caricis, nunquam sine pugillaribus. Illæ, si panem habeo, pro pulmentario sunt. *Ib. Ep. lxxxviii.*

† Varro in *Menip. Aul. Gel. lib. iii. cap. ultim.*—Temp. *Aul. Gell.*

‡ *Epist. Dion ad propinquos.*

§ *T. Tuscil. v.*

|| Prima salutantes atque altera continet hora;

Exercet rancos tertia caustidicos;

In quintam varios extendit Roma labores;

Sexta quies lassis, septima finis erit;

Sufficit in nonam nitidis octava palæstris;

Imperat extructos frangere nona toros.

Lib. iv. Ep. 8.

gram,

gram, describes the manner in which the *Romans* divided the day in his time, and appropriated the successive hours from six in the morning, to the various occupations of the day; in which we find they began at the ninth hour to extend the *Triclinia*; but as the whole *Apparatus* of them became at length very large and elegant, they could not be well prepared before the tenth hour.

THE hour of supper was later among the *Greeks* than the *Romans*. This is confirmed by * *Aulus Gellius*, and by † *Vitruvius*, who directed that the supper-room should be constructed in such a manner, that the situation assigned to the *Triclinia* in the supping room, should have its aspect to the setting sun.

THESE evening suppers were therefore called *Cœnæ tempestivæ*, because a *stated* hour was appro-

* *Cœnæ tempus apud Athenienses, ubi jam advesperasceret: Romæ vero antequam advesperasceret. Lib. xxiii. cap. 8.*

† *Hyberna triclinia recedentem solem spectare debent. Lib. vi. cap. 5.*

priated to them; but this expression had no kind of relation to their manner of *eating* and *drinking*, or the *duration* of them, and widely differed in other respects from those of the *festal* kind, which were likewise called *Cœnæ tempestivæ*, because a *stated*, though a different hour, was appropriated to them.

HOWEVER some modern commentators, fond of innovations, and of shewing a superior sagacity, have distinguished all convivial entertainments, which were irregularly or intemperately extended to a late hour, by the name of *Cœnæ Intempestivæ*; but instead of illustrating, have greatly perplexed the accounts given of them by the Ancients. Neither have there been wanting among the moderns, others of equal learning, and more impartial judgment, who have justly censured this innovation; and as my intention in this chapter is more particularly to describe the customs and manners which prevailed among the *Greeks* and *Romans* in their regular convivial suppers, it will be necessary to take a short view of their *festal* suppers, to distinguish their real characters from those of the former, and to fix more certain limits between them.

THE

THE *Greeks* and the *Romans* were early formed to a superstitious reverence of their gods, and an exact attention to their religious ceremonies. After the rites and sacrifices peculiar to them were performed, the remaining part of the day was entirely devoted to feasting and mirth. A more early hour was appropriated to the beginning of these festal entertainments, which was the *fifth* hour, or according to our computation, the eleventh in the morning. These were likewise on that account only called *Cœnæ tempestivæ*, though a greater freedom of living always prevailed in them, and the *duration* of them was much longer.

* BULLINGERUS, supported by the authority of *Lipsius*, asserts, that all suppers which were intemperately prolonged to a late hour, were erroneously called *Cœnæ tempestivæ*, and that it was absurd to suppose that these festal entertainments, which began after the tenth hour, and were often extended

* Convivia alia erant tempestiva : Alia intempestiva ut Lipsius putat : Certe convivia tempestiva diei non potuerunt, quæ post decimam aut undecimam horam inciperent, et ad instiam sequentis die extraherentur. Vid. Jul. Cæs. Bullingeri Dissert. de Conviv. Veterum, in tom. ix. Gronov. de Antiq. Roman. lib. . cap. xxiii.

to

to the beginning of the next day, could be called *tempeſtiva*. * *Gronovius* entirely differs from them, and ſays, that the learned *Salmaſius* had evidently proved, that the term *intempeſtiva* was never applied to any of their convivial entertainments, and was entirely unknown to any of the ancient authors, but introduced into ſome of their books by the ignorance of ſome tranſcribers, or librarians. At the ſame time he cenſures *Bullingerus* for his *partial* quotation of a paſſage in † *Cicero*, (in which he expreſſes the *delight* he received in frequenting theſe feſtal *Cœnæ tempeſtivæ*) as a proof of this aſſertion; for that one of his character could not be ſuppoſed to have given ſuch a ſtrong approbation of them, had they not been of a temperate and regular kind: But ‡ *Gronovius* juſtly obſerves, that *Cicero's* obſervations on this ſubject, are rather a

* Sed *Salmaſius* oftendit convivia *intempeſtiva* veteribus erant incognita, et a ſciolis et imperitis librariis in nonnullos libros invecſta: Antiquiſſimos libros non noſſe niſi *tempeſtiva* convivia. In Præfat. ad tom. xii. *Antiquit. Roman.*

† *Ego tempeſtivis conviviis delector.* De Senectute.

‡ Ut clare patet ex loco *Ciceronis* quem ipſe *Bullingerus* aſſert. Ego propter ſermones delectationem *tempeſtivis* conviviis delector, cum paulo poſt addit hæc convivia ſolere in multam noctem produci— In eadem Præf.

confutation of his opinion, as immediately in the subsequent part of this paragraph he acknowledges, that the same festive freedom prevailed in them, which particularly attended all entertainments of that kind. This cannot be more clearly expressed, than in an elegant and spirited translation, which a very ingenious author has lately given of *Cicero's* Treatise of Old Age. “ * I will acknowledge that “ I always took a singular satisfaction in frequent- “ ing the meetings of these little societies, which “ are known by the name of confraternities, and “ which were first instituted when I was *Quæstor*, “ on the statue of *Cybele* being received into the “ public worship. At the return of these anniver- “ sary assemblies, I used to partake with my bre- “ thren of the society in their festal meals, never “ to excess indeed, however with a certain free- “ dom, which is natural to gay spirits, and which “ usually attend that period of life, and which “ gradually subside as more serious years advance. “ But the principal satisfaction which I received “ from these entertainments arose much less from “ the pleasures of the palate, than from the op-

* Cato, or an Essay on Old Age, by Marcus Tullius Cicero, with Remarks.

“ portunity

“portunity they afforded me of enjoying a *large*
“*circle* of my friends.”

BUT this festal entertainment, to which *Bullingerus* refers, began at the usual early hour in the morning at eleven, or the fifth hour, and its anniversary return was probably more frequented by him, as it was instituted when he was *Quæstor*, and consisted chiefly of his friends; and though it was extended to a late hour, yet may be considered as a temperate society, when compared to others of the festal kind, which we find from him and others, were attended with profusion and intemperance, and often extended to the next day, and yet were always called *tempeſtiva* *.

THIS passage is introduced by *Cicero* among many others, with a view only of shewing, that *old Age* is not deprived of that share of sensual and rational pleasure, which is sufficient to make it

* *Claudius conviviis tempeſtivis delenitus. TACIT. lib. xi. Tempeſtivis conviviis gaudet. Ib. Hiſt. ii. Lollius in tempeſtivis gladiatorum conviviis. Cicero, Act. iii. in Verrem. In tempeſtivis conviviis probari. Ib. Ep. i. lib. ix. ad Attic. Quasi cœnas quam lautas et tempeſtivas. Id. per Muræna.*

happy, and that he was capable of attending these anniversary entertainments, and enjoying them among a promiscuous number of his friends.

He proceeds in the next paragraph to describe the superiour social happiness which he enjoyed in his regular evening suppers, not in a *large Circle*, but in a small and select number of his friends ; and lightly points out the various customs and elegant circumstances which sometimes attended them, and contributed to render them more splendid and agreeable.

THE real and very material difference between them will appear in a stronger light, when compared in the same translation. “ Agreeably to this
 “ way of thinking our ancestors distinguished these
 “ kinds of amicable feasts, by the name of convivial-banquets, as being chiefly calculated for the
 “ more rational purposes of social and friendly intercourse ; whereas the *Greeks* denominate them
 “ by a term merely of eating and drinking, as if
 “ these two articles, which ought to be considered
 “ as the lower objects of their meeting, were first
 “ and principal in their estimation. For my part,
 “ I receive

" I receive so much pleasure from these hours,
 " which are thus devoted to chearfulness, that I
 " long to prolong my meals, when the company
 " is composed of men of my own years, few of
 " which are indeed now remaining; but when it
 " consists of such company as yourselves*; and I
 " acknowledge my obligations to old age for hav-
 " ing increased my passion for the pleasures of con-
 " versation, at the same time that it has abated it
 " for those which depend solely on the stomach.
 " I would not however be thought so professed an
 " enemy to the latter, as to deny, that within cer-
 " tain limits they may very reasonably perhaps be
 " indulged; and I declare, for the satisfaction of
 " those, who are unwilling to part with this kind
 " of gratification, that I do not find old age a dis-
 " qualification for the enjoyment of them. I take
 " delight in joining those social parties, where,
 " agreeable to the custom of our ancestors, a pre-
 " sident of the club is appointed, and am much
 " pleased to hear him deliver out his important
 " edicts. I rejoice in these moderate refreshing
 " cups, which *Socrates* recommends in *Xenophon's*

* Scipio and Lælius.

" banquet,

“banquet, and am well pleased with the artificial
 “method of warming and cooling the Wine, as
 “the different seasons of the year invite. Even
 “when I am in the country with my *Sabine* neigh-
 “bours, I allow myself the same kind of indul-
 “gence, as I add one every day to the number of
 “their evening societies, which we generally lengthen
 “out by a variety of amusing conversation, until
 “the night is far advanced.”

It is evident that the festal entertainment, which *Cicero* describes, more particularly refers to that of *Cybele*. The same author in his remarks on this Essay on Old Age, observes, that these societies were instituted in honour of particular divinities, for the purpose of celebrating these annual festivals, which he compares to a custom of the same kind, which prevails in *Roman* catholic countries, where in every great town there are societies under the title of *Contraeries*, who celebrate the anniversary of some particular saint, whom they have chosen for their patron.

THE *Grecians* and *Romans* had a great variety of deities: Some were of a more ancient kind; such

such as the guardian gods of their country, to whom more solemn divine rites, and more splendid feasts, were appointed. These are enumerated by various authors. The learned * Dr. *Potter* has given a large alphabetical list of the former, which exceeded that of the *Romans*; and *Athens* had a greater number than any other *Grecian* republic. The great festivals were very magnificent, and celebrated at the public charge. The *Athenians*, who were particularly fond of them, to prevent the public treasury from being exhausted by their festal entertainments, applied the confiscated estates to these purposes. † *Aristotle* observes, that these festivals were called *Θειναι*, *Θεοναι*, *Θαλιαι*, because they thought they were obliged, in honour of the gods, to get drunk on these occasions.

ON these great festivals no public business was transacted in the courts or senate; but the inferior ones were observed with less forms, and by their particular votaries. Many who declined attending these public festivals, on account of the intempe-

* Greek and Roman Antiquities.

† Οτι δια τους θεους οινουσαι δειν υπελαμβανον. *Ethic. ad Nichomac. lib. viii.*

rance and confusion which usually attended them, celebrated them in a more private festive manner with their friends, after having first performed the rites and forms peculiar to the day. * *Horace*, who did not love a crowd, celebrated in this manner the day devoted to *Neptune*, and urges *Lyde* to make haste, and get the Wine ready, as the festal hour was advanced.

THE pontifical festal suppers were more particularly distinguished for their elegance and magnificence, than any other. † *Cicero* compares an entertainment given to him in his progress to one of this kind, by a proverbial expression; and ‡ *Horace* makes use of the same allusion. One of the most curious fragments of antiquity is a descrip-

* Festo quid potius die
Neptuni faciam? Prome reconditum

Lyde strenua, Cæcubum

Munitæque adhibe vim sapientiæ.

Inclinare meridiem

Sentis.

Lib. iii. Ode 28.

† Epulati essemus saliare in modum, i. 5 ad Attic. 9.

‡ ——— nunc Saliaribus

Ornare pulvinar Deorum

Tempus erat dapibus.

Lib. i. Ode 37.

tion

tion of a supper of this kind, which * *Macrobius* transcribed from the records of *Metellus*, the high-priest. It was the inauguration supper of *Lentulus*, when he was made *Flamen Martialis*, or priest of *Mars*. The guests who met on this occasion were all sacred persons, priests, and vestals, whom he particularly enumerates, and the several dishes which composed the *Antecæniûm* and *Supper*: The former consisted of such materials, as were most proper to excite the appetite, and the others of such as were equally capable of gratifying it. The reader's curiosity will be more agreeably engaged, by referring him to the account which *Dr. Arbuthnot* has given of the whole entertainment.

AMONG the various articles of the *Antecæniûm*, the † pickles, and particularly the *Garum*, were distinguished for their price and exquisite taste. This preparatory repast, when temperately used, was regarded as an agreeable and salutary refresh-

* Lib. ii. cap. 9.

† Singulis millibus nummum permutabis ejus congios binos.
PLIN. xxxi. 7.

Accipe fastosum munera cara garum.
Nobile nunc sitio luxuriosa Garum.

MART. Lib. xiii. Ep. 102.

ment after warm bathing, and contributing to strengthen the appetite and digestion, and was concluded with taking a moderate quantity of generous Wine and honey, which by the *Greeks* was called Προπομα *, and by the *Latins* Promulsis. *Athenæus* says, this was usually carried round before supper. *Plutarch* mentions the different preparations, and censures the abuse of it. † When *Cicero* informs *P. Pætus* of his intention of supping with him, he warns him to be well prepared, as his appetite is very keen, and that he does not design as usual to cloy it with his *Antipast* and *Promulsis*, which he has entirely disused. The preparation which was most approved by the *Romans*, was composed of four parts of the best *Falernian* Wine, mellowed by a proper age, and two parts of the finest *Grecian* Honey ‡. This became at length a necessary and refined article of

* Προπομα τι προ τη δειπνι περιφερειαι.

† Neque est quod in promulside spei ponas aliquid, quam totams sustuli: Solebam enim antea debilitari oleis et Lucanicis tuis. *Ep. ad Fam. lib. ix. 16.*

‡ Sperne cibum vilem: nisi Hymettia mella Falerno:

Nè biberis diluta. *HOR. Lib. ii. Sat. 2.*

luxury

luxury in all elegant entertainments. * *Marzial* praises its *nectarean* and fragrant qualities, and † *Horace* condemns *Aufidius* for imposing on them with his *sharp* and *rough Promulfs*. This mixture had been early esteemed for its salutary and agreeable virtues, and is generally called *Oivomeλι*. It is often recommended by *Hippocrates*; and ‡ *Homer* celebrates the bowl of *Pramnian Wine* which *Circe* prepared for *Ulysses* and his companions.

THE luxury of the *Romans* encreased in proportion to their opulence. We find that they were more fond of fish than of any part of their food, and more extravagant in the price. The *Accipenser*, or sturgeon, the *Muræna*, or lamprey-eel, the *Scari*, the *Rhombus*, or turbot, the *Mullus*, or mullet, the whiting, or *Asellus*, were principally esteemed by them. Some of these were brought

* Attica nectareum turbatis mella Falernum :
Miseri decet hoc a Ganymede Vinum.

Lib. xiii. Ep. 108.

† Aufidius forti miscebat mella Falerno,
Mendose : quoniam vacuis committere venis
Nil nisi lene decet ; leni præcordia mulso
Prolueris melius.

Lib. ii. Sat. 4.

‡ Milk newly press'd, the sacred flour of wheat,
And honey fresh, and Pramnian Wines the treat.

Odyf. x. ver. 268.

from distant provinces in light vessels called *Triremes*, remarkable for their velocity. * *Juvenal* mentions a mullet which cost forty-eight pounds, and *Macrobius* another, which cost sixty-four. † *Horace* points out this extravagance in foreign fish; nor were their fish-ponds less expensive. ‡ *Varra* says, that you may more easily get a set of horses out of *Hortensius's* stables, than a bearded mullet out of his fish-ponds. From the various instances collected by Dr. *Arbuthnot* of the great value which the *Romans* put upon fish, we shall be less surprised to find among them that *C. Hirrius* sold his for quadragenes HS. thirty-two thousand two hundred and ninety-one pounds, and that *Lucullus's* were sold for the same price after his death.

THE price of these, and several other provisions, was greatly enhanced by the preference

* — mullum sex millibus emit. Sat. 4.
Septem millibus. Ch. iii. 16.

† Non me Lucrina juverint conchyliæ,
Magisve rhombus, aut scari,
Si quos Eois intonata fluctibus.
Hyems, ad hoc vertat mare. Epod. 2.

‡ Celerius voluntate Hortensii ex Equili educeres Rhædarias ut
sibi habeas mulas quam e piscinis barbatum mullum. Lib. iii.
cap. 17.

which

which was given to such as were produced from particular places, or provinces: The mullets from *Symetum*, lamprey-eels from *Sicily*, shell-fish of *Pelorus*, herrings of *Lepara*, the belly of the tunny fish taken from *Pachymum*, kids from the island of *Melos*, radishes of *Mantineia*, turneps of *Thebes*, beets from *Afora*. This distinction often occurs in several authors, and therefore some extraordinary expensive articles which have been mentioned, are not to be regarded as the common prices of them, though they are sufficient indications of the affluent fortunes which several individuals then enjoyed, and the vain or vicious luxury which prevailed among some, even in the more virtuous times of the commonwealth.

THE quantity of wealth was very different in *Rome* in different ages. In the flourishing state of the commonwealth, the proportion which their circulating species bore at *Rome* to the price of their commodities, and the number of their inhabitants (which may be called the relative riches of any place), did not probably exceed that of many cities now in *Europe*, as there was then a less quantity of circulating specie in *Europe*, than since.

since the discovery of the *West Indies*; but in the time of *Augustus*, when almost all nations had yielded to his arms, and their trade centered in *Rome*, there was certainly a greater quantity of circulating specie in that city, than there is now in any city in *Europe*. However, though the arts and sciences, elegance and order, were encouraged in his reign, and riches were more equally divided, yet it was not in his power to prevent the increasing prices of their commodities, and the depravation of their manners, which will always be the consequence of great opulence and luxury.

In the succeeding reigns, we find that they made a rapid progress. The emperors gave the example, and the flatterers of their power and profusion accumulated immense fortunes, while the rest were oppressed with poverty and slavery. The rapacity of individuals increased with their power and riches. *Caligula* possessed both in a supreme degree *. *Suetonius* relates, that he used to roll himself in heaps of gold, and that † *Nero's* gene-

* In Vita Calig.

† In Vita Ner.

ral instruction to the tax gatherers was, * “ You
 “ well know my intention ; collect as much as you
 “ can, and leave them as little ;” and new words,
abradere, corradere, were coined to express this
 kind of pillage. In these times no limits were
 fixed to their profusion and intemperance. *Suetonius*
 says, that those usually given by *Caligula* were
 so extraordinary, that he almost exhausted the
 treasures of the empire. † *Dio* mentions, that
Vitellius spent in one year twenty-two thousand
 five hundred myrrhiads of drams, or seven million
 two hundred and sixty-five thousand six hundred
 and twenty-five pounds. ‡ *Tacitus* says he spent
 the same sum within a few months. It is no won-
 der therefore at this time we should then find the
 § epithet || *Intempestiva* first applied to these en-
 tertainments, as no *stated* hour was fixed to their

* Scis quid mihi opus est. Hoc agamus ne quis quicquid ha-
 beat. Suet. in Vita Neron.

† Dio in Vitel.

‡ Lib. xvii.

§ Senatum populumque objurgavit edicto quod Cæsare præliante
 intempestiva convivia circum et theatra et amænos secessus cele-
 brarent in Vit. Calig.

|| Convivia intempestiva et perpetuandi insana libido. Lib. ii.

beginning

beginning or duration, or to their intemperance and profusion. This is a sufficient confirmation of what *Salmasius* and *Gronovius* have asserted, that the term *Intempestiva* was not to be found in any of the ancient authors, without having recourse to the ignorance or errors of librarians to confirm their opinions, as these kinds of entertainment were then of a *modern* date, and entirely unknown in former times.

THOUGH various instances of this kind may be produced from the best authorities, and which seem almost incredible, I shall only mention a short specimen of them, which was given to *Vitellius* by his brother, and has been transmitted to us, on account of the expensive articles which were curiously collected with that singular intention. * Among many other there were two thousand of the choicest fishes, seven thousand of the

* Famofissima super cæteros fuit cœna, ei data adventitia a fratre, in qua duo millia lectiffimorum piscium; septem avium appofita traduntur. Hanc quoque exsuperavit ipfe dedicatione patinæ, quam ob immensam magnitudinem clypeum Minervæ ἀγίδα πολυεχὺς dictitabat. In hac Scarorum jecinora phasianorum, et pavonum cerebella, linguas phænicopterum, murænarum lactes a Carpathio usque et freto Hispaniæ per Navarchos et triremes petitarum, commiscuit. SÆTON. in Vitel. cap. xiii.

choicest

choicest birds. One dish, from its amplitude and capacity, was called *Minerva's* buckler, which chiefly consisted of the livers of *Scari*, the brains of pheasants and peacocks, the tongues of parrots, and lampreys bellies brought from the more distant provinces.

* HORACE censures the vitiated taste which prevailed in his time for peacocks, and curious birds, whose chief merit consisted in the extravagant price which was given for them; and † *Claudian* seems particularly to allude to the various profusion of these entertainments.

* Non Afra avis descendat in ventrem meum;
Non attagen Ionicus
Jucundior.

Epod 2.

Vix tamen eripiam, posito pavone, velis quin
Hoc potius quàm gallinà tergere palatum,
Corruptus vanis rerum: quia veneat auro
Rara avis.

Sat. 2. Lib. ii.

† ——— traduntque palato

Sidereas Junonis aves, et si qua loquendi
Gnara coloratis viridis defertur ab Indis,
Quæsitus trans regna cibus; quorumque profundam
Ingluviem non *Ægæus*, non alta Propontis,
Non freta longinquis Mæotida piscibus explent.

Lib. ii. in EUTROP.

THE *Grecians* were more elegant and judicious in their entertainments than the *Romans*. Dr. *Arbutnot* has likewise made some observations on their riches and money affairs, collected from several instances; from whence it appears that the *Romans* could not be said to be rich, till after the conquest of *Greece*. *Greece* was much larger than *Italy*, and *Asia* than *Greece*, and the revenues of the *Athenian* commonwealth much larger than those of *Rome*, considering the small extent of their dominions; for those of the *Athenians* were very confined on the continent, and scarce as large as *Yorkshire*, though this celebrated republic made so great a figure in the world with so small a dominion.

* But the conduct of the *Grecians* was in many respects very different from that of the *Romans*; in some equally great, in others very superiour; in the whole more uniform and constant; for after their conquest over the *Persian* arms, first under *Xerxes*, and afterwards *Darius*, though nothing was more exalting than the victories they obtained,

* Vide Rollin.

or more tempting than the glory they acquired by their illustrious actions, they long preserved their love of liberty, and their ancient manners: But, though invincible to the *Persian* arms, they at length could not resist their *riches* and *luxury*, of which *Philip* and *Alexander* took the advantage, subduing them by the power of gold, and artfully dividing them into different factions. However, though thus reduced, they long retained their native passion for liberty; and when the *Roman* arms reduced them to a depending province, they still retained their usual spirit, and warmly supported *Pompey* when he seemed to fight for the restoration of the republic, and after *Cæsar* was killed, erected statues to *Brutus* and *Cassius*. When entirely deprived of all power, they still retained a more splendid empire over the *Romans*, who paid a willing homage to their virtues and learning, and generously continued to *Achaia* almost all their former privileges: *Athens* still continued to be the distinguished seat of learning and the Muses, and their productions in all the arts, the standard of refined taste, and a happy genius.

I HAVE dwelt longer on these festal and irregular entertainments of the *Greeks* and *Romans*, more particularly the latter, and the different customs arising from their increasing affluence, as without this distinction several passages in the authors of these times must appear perplexed and obscure. Neither from this general view of the luxury of the *Romans* can we form any true judgment of the taste and manners which prevailed in their more select and regular evening suppers. These were often agreeably varied; but the order and elegance of the *Grecian* manners and customs were chiefly observed in them.

C H A P. XII.

Of the Evening Suppers of the Greeks and Romans.

WE find that the *Greeks* and *Romans* appropriated the succeeding hours, from six in the morning, to that of supper, to the public and private occupations of the day. Within that time, all business of the courts and senate was transacted, all visits of ceremony were made, and all public spectacles were exhibited. On this account, such as * *anticipated* the usual time of supper, and

* Est qui nec veteris pocula Maffici,
Nec partem solido demere de die
Spernit.

HOR. Lib. i. Ode 1.

wasted the hours of business in dissipation and luxury, were censured and despised; and when † *Horace* describes the various absurd circumstances which attended the supper given by *Nasidienus*, he begins with the *Ticket* of invitation which he had received, appointing the hour of meeting to be at twelve next day.

BUT even in these times of affluence and luxury, all persons of character met at the *stated* hour, unless prevented by some extraordinary accident, and were so punctual to it, that such as were noted for neglecting it, were likewise remarkable for the irregularity of their conduct and manners in other respects. This is confirmed by *Plutarch*, who gives a peculiar instance of it from an oration of *Polycharmus*, in which, to give a greater force to the proofs he had alledged in vindication of his character, he makes a solemn appeal to the *Athenians*, if he had ever violated the rules and order, which are observed in their evening suppers.

† Nam mihi quarenti convivam dictus here illic

De medio potare die.

Sat. ii. 3.

As the day of business had then ceased, or rather (as * some have more emphatically expressed it) *expired*, to revive more agreeably; the remaining hours, until they retired to rest, were entirely devoted to social happiness and pleasure; and as they were often lengthened to a late hour, no circumstances were wanting to make them not only useful and agreeable, but often delightful; for after the first tables were removed, the pleasures of Wine and conversation succeeded, which were sometimes promoted, or agreeably interrupted, by various entertainments of music, singing mimes, theatrical pieces, and other exhibitions, which the *Greeks* expressed by the general term of *αἰσχρομῦσα*. *Plutarch* distinguishes those which were most approved. But the preference was always given to *Music*, which on these occasions was seldom omitted; and though the *Symposium* of *Plato* and *Xenophon* differed in every other article, yet they agreed in this. *Athenæus* describes the different kinds of *convivial* music, which were generally used. But in the most elegant entertainments, the best performers in vocal and instrumental music

* *Cœna diei sepulchrum.*

Jam *moriente* die rapuit me *cœna* benigni

Vindicis _____ STAT. SYLV. lib. iv.

were always engaged ; nor was it unusual for some of the guests to distinguish themselves by their superior skill in this divine art, which was then esteemed a necessary part of a generous education, and always added a lustre to their character, however eminent it was before. This is confirmed by *Cicero* *, who gives a remarkable instance of it in *Epaminondas* and *Themistocles*.

THE *Greeks* particularly excelled in music. *Homer* seems to think it as absolutely necessary in all his convivial entertainments, as the bowl of purple Wine. † He celebrates *Phemius* for his fine voice and hand ; but to make the banquet of the gods more perfect, ‡ *Apollo* tunes the lyre, and the *Muses*

* Summam eruditionem censerunt in nervorum vocumve cantibus. Igitur et Epaminondas, princeps meo judicio fidibus clare cecinisse dicitur, Themistoclesque ante aliquot annos cum in epulis recusaret lyram, habitus est indoctior : Ergo in Græcia musici flourerunt, discebantque id omnes, nec qui nesciebat satis excultus doctrina putabatur. Tusculan. Quæst.

† To Phemius was assign'd the chorded lyre,
Whose hand reluctant touch'd the warbling wire ;
Phemius, whose voice divine could sweetly sing
High strains responsive to the vocal string.

‡ Thus the blest Gods the gen'ral day prolong
In feasts ambrosial, and celestial song ;
Apollo tun'd the lyre, the Muses round
With voice alternate aid the silver sound.

alternately

alternately sing. While this divine concert lasted, they certainly wanted no *Ambrosial Nectar* to increase their delight.

THOUGH this manner of dividing their time, and expending so great a part of it on the various pleasures of the table, seems liable to many objections, yet we find that it prevailed for many ages, among persons whose judgment and taste had been universally approved and admired; and who often acknowledge, that after the day had been employed in the arduous and anxious scenes of business, they always acquired there, not only a grateful return of strength and spirits, but enjoyed a singular satisfaction from that social and free conversation which prevailed in these evening entertainments. As the whole business and diversions of the day were likewise transacted before this *principal Meal*, it is not improbable but that the public assemblies of every kind were conducted with more order, decency, and prudence, and that many irregularities and fatal accidents were prevented, which more frequently happen in such places, when the passions have been previously inflamed by Wine, and intemperance.

THERE is a great difference between these convivial entertainments, in which the *guests* had no particular connexion, but were promiscuously invited, and others, in which a few select friends were associated, and more frequently met together. Several persons of opulent fortunes, or in eminent stations, kept a regular elegant table, but occasionally the whole *apparatus* was more splendid. * *Plutarch* gives a remarkable instance, in the well known story of *Lucullus*, who constantly lived in a splendid manner, but on that occasion surprised his guests with the magnificence of the entertainment, though he gave no other direction to his servant, but that he should sup in the *Apollo*; for the establishment appointed to that room was sixteen hundred pounds.

THE customs and forms which were usually observed in the entertainments of this kind are well known; but we are more imperfectly informed of their *interior* manner of living in their own families, and enjoying there that social happiness, which is peculiar to it. However, we may con-

* In *Lucul.*

clude from * *Seneca* that they seldom supped in private, which he compares to the life of a *Lion* or *Wolf*; and certainly he would have extended this allusion farther, had it not been usual among them to form particular parties of men and women, who supped and freely conversed together; as their society contributed more to the happiness of their life, and to polish and improve their manners, than all the knowledge they could have acquired without it, in their most learned *Symposia*; even in that of *Plato*, where the subject of conversation was on *divine Love*; or that of *Xenophon*, though animated with the finest sallies of wit and humour. We have many instances of this kind: *Cicero* mentions one, to which he invited the men, and his brother *Quintus* the women; but at such times they always sat at a particular table; and † he severely censures the indecent custom which then too much prevailed, of introducing* their wives into these convivial societies, which were formerly appropriated to the men, and where they

* Cœna sine amico est vita leonis vel lupi. Ep. xvii.

† Quis enim Romanorum pudet uxorem inducere in convivium? Aut cujus mater familias non primum tenet locum, atque in celebritate versatur? Quod fit aliter in Græcia. Act. iii. in Verrem.

reclined on the same *Triclinium*. However he observes, that this custom never prevailed in *Greece*, nor even among any of that country, while they resided at *Rome*.

THIS was their general mode of living ; but the true taste and manners of the times will chiefly appear in the more private societies of persons, who, from a similitude in their taste, sentiments, and studies, were more immediately connected, and more frequently met together, than in the mixed and more splendid entertainments. * *Cicero*, in his Treatise on Old Age, gives a short description of them, and lightly points out several agreeable circumstances which occasionally attended them ; but he dwells more particularly on the singular benefits arising from them in a letter to *P. Pætus*, who had contracted an hypochondriac disorder, and had for some time declined frequenting these social suppers, though formerly distinguished for his lively wit and humour. A long friendship had subsisted between them ; and as *Cicero* was very anxious about his state of health, after having rallied him a little on that subject, he urges him in the follow-

* Vide p. 245.

ing manner to return to his former way of living.
 “ * But to be serious: I beseech you, my dear
 “ *Pætus*, to take my advice in this article, so ne-
 “ cessary to the real happiness of life, that you will
 “ associate yourself with some of those worthy and
 “ cheerful friends, who esteem and love you. Life
 “ languishes without such society, and nothing
 “ more contributes to its felicity. Nor do I refer
 “ this so much to the gratification of the palate, as
 “ to its more *salutary* influence on your *Food* and
 “ *Spirits*, and disengaging your mind from any
 “ anxious cares: These are most effectually pro-
 “ moted by a free conversation; nor is it ever more
 “ delightfully animated, than in these *convivial*
 “ suppers; on which account, we have more justly
 “ distinguished them by that *name* than the *Greeks*,
 “ by a *term* only expressive of the *powers of Wine*,
 “ as we then indeed *enjoy life together*.”

* Sed mehercule mi Pæte extra jocum moneo te: Pertinere ad beate vivendum arbitror, ut cum viris bonis, jucundis tui amanti- bus vivas. Nihil est aptius vitæ: nihil ad beate vivendum accom- modatius: Nec id ad voluptatem refero, sed ad communicationem vitæ, atque victus, remissionemque animorum; quæ maxime efficitur sermone familiari, qui est in conviviis dulcissimus: Ut sapientius nostri quam Græci illi *συμπόσια*, seu *συνδαιπνæ* nominarunt: Nos convivium: quia tum maxime simul vivitur. Lib. ix. Ep. 34. Ad Fam.

IN these societies they formed and enjoyed their most agreeable and lasting friendships. No one seems to have been more pleased with them than *Cicero*, or more capable by his conversation of making them delightful. However, he thought that the best Wines, and good cheer, were likewise absolutely necessary to animate and promote that free conversation. We may judge of his taste, and the usual manner of living which prevailed even in their select societies, from what he says on the subject in some of his former letters to his friend *Pætus* : * “ You are by no means to consider me “ as a friend to that injudicious profusion, which “ is now the prevailing taste in our modern entertainments ; on the contrary, it is that more elegant luxury I admire, which you used to display when your finances were more flourishing.” And in † another, where he acquaints him with his intention of supping with him, he says, “ I do “ not insist however, that you spread your table “ with so unbounded a profusion, as to furnish out “ a splendid treat with the remains : I am so

* Lib. ix. Ep. 16. ad Fam.

† Lib. ix. Ep. 20. ad Fam.

“ wonder-

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"wonderfully moderate, as to desire nothing more
"than what is *perfectly elegant* in its kind."

THE *Greeks* were more fond of wine than the *Romans*, and were supplied with a greater plenty, and variety of the best genuine kind: They were more temperate, and less profuse in their eating. *Plato*, who was remarkably temperate, and restrains the use of Wine within very strict limits, allows a more generous use of it in these convivial suppers, as nothing, he observes, disposes the mind to that *benevolence* which is most apt to terminate in *friendship*. * *Plutarch* not only expresses the same sentiments, but attempts to explain its mechanic operation in producing these effects, by *gradually* opening some peculiar canals, and avenues to the soul, which then gently admit some of the milder parts of the Wine into them, which if intemperately taken would be irregularly diffused through the whole body.

WE find that this convivial conversation was occasionally directed to various and different subjects,

* *Symposia*, lib. iv.

which were often proposed and regulated by the host, or a person appointed to preside. This was an article so necessary to make them useful and agreeable, that *Plutarch* observes, in the *Symposia* of *Plato* and *Xenophon*, no particular viands of the table are mentioned, as being objects of an inferior notice. But he enumerates the different convivial topics of conversation, and distinguishes those which appear to him most proper, from others which he condemns, though frequently used; and seems indeed inclined to digest them into a kind of system: But certainly the conversation can never be more pleasing and agreeable, than when it flows spontaneous, without any restraint, and naturally arise from the *present occasion*, and *disposition* of the guests.

THE *Nepenthes* of *Helen*, with which she prepared that sovereign bowl, when *Menelaus* entertained *Telemachus* and *Pisistratus*, has engaged and perplexed the attention of many commentators; as * *Homer* says, that after being mixed with the

* Mean time, with gen'ral joy to warm the soul,
Bright Helen mix'd a mirth-inspiring bowl;
Temper'd with drugs of sov'reign ease t'assuage
The boiling bosom of tempestuous rage;

Wine, it communicated to it such surprising, and peculiar virtues, as entirely banished from the mind all painful and distressing sensations, and substituted others, which were most pleasing and delightful. However it is very evident, that *Homer's* intention was not to ascribe these powerful qualities to the *plant*, distinguished by that *name*, but to celebrate the superior powers of *Helen's conversation*, with which she charmed the guests, and that this was the *real Nepenthes*, which communicated these *inspiring virtues* to the Wine. *Eusebius*, who was well acquainted with the true spirit of *Homer*, ^{never} ~~early~~ made this observation, which has been ~~early~~ confirmed by the best judges, particularly *Plutarch* and *Athenæus*.

HE extends this allegorical history of the *Nepenthes*, by assigning its growth to *Ægypt*, fertile in the production of plants of various virtues; and by observing, that it was a gift to *Helen* from the

To cleanse the cloudy front of wrinkled care,
And dry the tearful sluices of despair.
Charm'd with the virtuous draught, th' exalted mind
All sense of woe delivers to the wind;
Tho' on the blazing pile a parent lay,
Or a lov'd brother groan'd his life away.

POPE, book IV. v. 301.

N n

royal

royal *Polydamna*, the wife of *Thone*, from whom she learned its preparation and qualities. All these circumstances evidently allude to the accounts which * have been given of *Helen* having been early committed to the care and protection of this queen, who instructed her in the knowledge of the various arts and sciences, to which *Aegypt* gave their origin and improvements, with which *Helen* was adorned, when she returned to *Greece* †.

‡ In the description which *Homer* gives of *Helen's* beauty, her attractive graces, heightened by the elegance of her manners, sentiments, and persuasive elocution, and extensive knowledge, are

- * These drugs so friendly to the joys of life,
Bright *Helen* learn'd from *Thones* imperial wife ;
Who sway'd the scepter, where prolific Nile,
With various simples, cloathes the far'n'd soil ;
With wholesome herbage mix'd the direful bane
Of vegetable venom taints the plain :
From *Pæon* sprung, their patron God imparts
To all the Pharian race his healing arts.

Odyf. v. 315.

† Athen. lib. i.

- ‡ In this suspense bright *Helen* grac'd the room,
Before her breath'd a gale of rich perfume ;
So mov'd, adorn'd with each attractive grace,
The silver-shafted goddess of the chase.

lib. v. 157.

placed

placed in such a light, as must excite our love and admiration ; while her frailties are blended with such soft colours, that with the good natured *Menelaus* we either forget them, or impute them rather to her stars than inconstancy ; as she always lamented her absence from him and her country, and retained an unalterable affection to his superior qualities †.

¶ HOMER was well acquainted with the particular rules and customs which in his time prevailed among the *Greeks* in their different convivial entertainments, of which we have several instances ; but in this given by *Menelaus* to his illustrious guests, he seems to have exerted all his powers in exhibiting a perfect model of one of the most elegant and select kind ; in which no single circumstance recommended by the most eminent writers on this subject is wanting, nor any described by them, where

† For then with dire remorse, and conscious shame,
I view'd th' effects of that disastrous flame ;
Which kindled by th' imperious queen of love,
Constrain'd me from my native realms to rove ;
And oft in bitterness of soul deplor'd
My absent daughter, and my dearer lord
Admir'd among the first of human race
For every gift of mind and manly grace.

Ib. v. 357.

the guests are better chosen, or the conversation more judiciously directed to make it delightful : The dignity and hospitality of *Menelaus*, the Host ; the modesty, gratitude, filial virtues, and engaging behaviour of *Telemachus* ; the friendship of *Pisistratus* ; the beauty and eloquence of *Helen*, and all the united powers of Wine, never more happily concurred on any other occasion.

THIS beautiful description begins after the first course was over, and the prepared bowl was placed on the table *, when *Helen* filled the first glass, sacred to *Jupiter*, and invoked † him to be propitious to that happy meeting, devoted to mirth and friendly conversation, that superiour banquet of the mind. Among the different *symposial* to-

* The bev'rage now prepar'd, t'inspire the feast
The circle thus the beauteous queen address ;
Thron'd on Omnipotence, supreme Jove
Tempers the fates of human race above.

† By the same sanction of his sov'reign will,
Alternate are decreed our good and ill ;
To feastful mirth be thy white hour assign'd,
And sweet discourse the banquet of the mind :
Myself assisting in the secret joy
Will tell Ulysses' bold exploits in Troy.

POPE, v. 223.

pics

pics of conversation recommended by *Plutarch*, he gives the preference to that which is most *suitable* to the *present occasion*, and to the *disposition* and prevailing *passion* of the guests. In this *Homer* equally excels, in displaying the irresistible eloquence of *Helen* on the various virtues, sufferings, and fortitude of *Ulysses*, in which they *all sympathized*, and were transported in such a manner, as to *banish* all other ideas from their minds: But when *Ulysses* is represented disengaged from danger, and the vile attire which disgraced his person, and appears in his genuine form *; the mind of *Telemachus* particularly (to use the expression of *Milton*) must have been *wrapt in elysium*.

It was a general custom in these times to go into the warm bath before supper: Though the use of bathing is very ancient, yet *Homer* is the first who particularly mentions the manner in which it was administered. In his time we find, that all the circumstances necessary to make it use-

* ——— But when his form I view'd,
Fresh from the bath with fragrant oils renew'd;
His limbs with military purple dress'd,
Each bright'ning grace the genuine Greek confess'd.

Odys. v. 243.

full

ful and agreeable, were well known; which he describes with the elegance of a poet, and the judgment of a physician: In the *Iliad*, he enumerates cold bathing among the *exercises*, which the heroes used to strengthen their constitutions, and make them more capable of bearing the severity and vicissitudes of the seasons: But in the *Odysey*, we find them, in the vacant hours of ease and peace, indulging themselves in warm bathing, which * he places among the most agreeable amusements and pleasures of life.

In his time, this custom chiefly prevailed after long journeys, or any great fatigue, to cleanse the body, and remove any lassitude from their limbs, and to substitute a grateful sensation. No convenient or elegant circumstance was then wanting either in the structure of the baths, or the manner of preparing and administering them, to make them pleasing and delightful. † Thus he particularly observes,

* To dress, to dance, to sing, our sole delight,
To feast, to bathe by day, and love by night.

Odysey, Book viii. v. 105.

† Then to the dome the friendly pair invite,
Who eye the dazzling roof with vast delight;

Resplendent

that soon after *Telemachus* and *Pisistratus* had entered into the magnificent palace of *Menelaus*, they were conveyed to the spacious baths, attended by a train of beauteous damsels; and several indeed were necessary, to execute the several offices assigned to them; * and when *Telemachus* was entertained in the same hospitable manner by *Nestor*, the beauteous *Polycaste* was particularly appointed to attend the prince in the bath, and to apply the fragrant oils: This was the final part of bathing, and required great delicacy and art, as it was materially necessary to refresh, and supple the limbs, and prevent a too great, or continued perspiration. But the description which he gives of the preparing and administering the bath to *Ulysses*, where one of *Circe's* damsels presided, deserves † a parti-

Resplendent as the blaze of summer noon,
Or the pale radiance of the midnight moon:
From room to room their eager haste they bend;
Thence to the bath, a beauteous pile, descend;
Where a bright damsel train attend the guests
With liquid odours, and embroider'd vests.

Odyss. Book iv. v. 53.

* Sweet *Polycaste* took the pleasing toil
To bathe the prince, and pour the fragrant oil.

Ib. Book iii. v. 594.

† Αυταρ επειδη ζισσει υδωρ, ενι νηπι χαλκω,
Εξ ε' σταμινθου ετασα, λο' εκ τριποδος μεγαλοιο,

Θυμυρες:

cular attention, as all the *principal parts* of this process are there distinctly mentioned.

He observes, that after the *water* had been previously *heated*, in a *bright copper vessel* (χαλκος), and reduced to a proper temper in the *bath* (ασαμινθος), he placed him there in a proper attitude, and then ascended a high tripod, from whence she poured, and gratefully diffused (θυμηρες κερασασα) the water on his head and shoulders, which entirely removed the lassitude from his limbs, that had affected his mind with a most painful sensation.

It is very evident from this description, that the χαλκος, or copper vessel, in which the water was heated, was different from the ασαμινθος, or bath, into which it was afterwards received; and that the pouring, and gratefully diffusing the water on the head and shoulders, from a superiour situation, the bathing the limbs, and afterwards applying the fragrant oils to them, were *distinct operations*; and that several assistants were necessary to execute them in a proper manner. As this process there-

Θυμηρες κερασασα κατα κρατος τε και ωμων
Οφρα μοι εκ καματος θυμοφθορον ειλετο γυνων.

Odyf. lib. x.

fore

fore required so much attention and delicacy, we find that in his time these several offices were committed to the care of young damsels, who were particularly well versed in the parts which were assigned to them.

It is likewise evident, from comparing this description with the rules given by *Hippocrates*, six hundred years afterwards, and from the exact similitude between them, that *Hippocrates* must have acquired the knowledge of them from *Homer* : The only difference between them is, that *Hippocrates* has, with the same sagacity, variously adapted them to different diseases, and constitutions, with which *Homer* had directed them to the preservation of health, and gratefully removing any disagreeable or painful lassitude.

IN *Homer's* time, we find that neither baths, assistants, or any necessary, or elegant article, were wanting, to make warm bathing more agreeable and effectual. But * *Hippocrates* observes, that in

* Εστὶ δὲ οὗτος ἡσίων χρῆσις, διὰ τὴν ἀπάρσκειν αὐτῶν τῶν ἀνθρώπων ἐν οἰκίᾳ γὰρ οἰκίᾳ παρσκευασαὶ τὰ ἀρμύρα, καὶ οἱ θεραπευτοὶ ὡς δεῖ· εἰ δὲ μὴ παγκάλως λουοίτο, βλαπτέον αὐτὸν σμικρὰ. Hippoc. de Vict. Acut. lib. iii. Text 40.

his time, few houses were supplied with convenient baths, or a sufficient number of assistants, and other necessary materials; and laments, that he has often been deprived of the use of them on that account; for that any defect, or impropriety in the administration of them, would be highly injurious.

* HE dwells much on *varying* the heat of the bath, which he calls μετακερασμα, and on † *quick perfusions*, during the time of bathing, which he calls επαντλησιναι. These are likewise mentioned by *Homer*, and were poured from a high tripod on the head, and shoulders of *Ulysses*, when he was properly situated in the bath, and *Hippocrates* prudently directs, that after the operation was finished, the ‡ head should be immediately well rubbed with sponges, until it was perfectly dry; as any weakness, or remaining cold moisture, on that more sensible and noble part, must be particularly hurtful to it. *Homer* likewise mentions, that the office of applying the fragrant oil was consigned to

* Και μετακερασμα πολλου ητοιμασθαι. Text 44.

† Και τας επαντλησεις ταχειας ποιεισθαι. Text 45.

‡ Καφαλην μιν τοι ανεξηρανθαι χρη ως οινου τε μαλιστα, υπο σπογγιου εκμαρτομενην. Text 48.

Polycaste,

Polycaste, and *Hippocrates* directs that this operation should be finished before * the body is too dry.

FROM hence it is evident, that *Homer* and *Hippocrates* have mutually contributed to explain, and improve the rules of warm bathing; and that this is the *true sense*, in which this elegant description is to be considered, of the administration of *Circe's* bath to *Ulysses*; which all the *commentators* and *translators* have either mistaken, or expressed in a confused manner. Among these † *Mr. Pope*, who, in some instances, has produced several latent beauties in *Homer*, and given a new lustre to them, has, in this passage, chiefly dwelt on the heating, in the copper vessels, the *water*, which is to be received into the bath, but has entirely omitted, or perplexed, all the circumstances relating to the administration of it ‡.

* Και μὴ ἄλγαν ζῆρον χρεῖσθαι το σώμα. Text 41.

† That on the tripod, o'er the kindled pile
The water pours; the bubbling waters boil.
An ample vase receives the smoking wave,
And in the bath prepar'd my limbs I lave:
Reviving sweets repair the minds decay,
And take the painful sense of pain away.

Odysses, book X. ver. 423.

‡ See the original lines from *Homer*, p. 279.

THIS observation is not made with an intention of censuring those who have deviated from the sense and spirit of *Homer*, in which they would not have failed, had they not been unassisted with the comment of *Hippocrates* on these rules. I have likewise before observed, that the ancient descriptions of several mechanic operations are very *concise*; for as they were then particularly *well known*, the *principal* parts of them are only mentioned, and must therefore, after so many centuries, appear obscure to those who are not acquainted with the minute circumstances of them.

THUS far we can trace the state of warm bathing in *Homer's* time. It is uncertain what changes were made in it during the space of six hundred years afterwards, till it was revived by *Hippocrates*; but it seems to have greatly declined in that part of *Greece*, from its former flourishing state; as he complains that few houses were supplied with convenient baths, and other necessary materials. However, we have many *authentic* accounts of the encreasing number and elegance of baths in the succeeding ages: The baths of *Darius* are particularly famous for their magnificence; and

and * *Alexander*, after his victory, expressed an uncommon surprize at the splendour of them, and his delight in bathing in them.

THE *Asiatic* luxury was gradually derived to the *Greeks*, who, by their fertile genius, improved all the finer arts; and as they were distinguished for their taste in architecture, their baths not only excelled those of the former ages, but became the standard and model of the future. They first added to them the *Gymnasia*, or places proper for different kinds of exercise, with elegant walks, porticos, &c. which were equally ornamental and useful. They improved likewise the rules of warm bathing; and we find that the regular custom of warm bathing before supper, early prevailed among them. This evidently appears from *Plutarch's* description of the banquet given to the *seven Wise Men*; when each of them, on his arrival, was conveyed to the bath, before he entered the supping room, except *Thales*, who refused to go, and said he had already bathed; for it was usual in those times to have baths prepared for the invited

* Plutarch, in the Life of Alexander.

guests, who either had not private, or did not chuse to go into the public baths.

PLUTARCH observes, that the ancient *Greeks* and *Romans* had no public baths; and * *Seneca* says, that the ancient *Romans* washed only their legs and arms before supper, and that the use of warm baths did not begin to prevail among them, till some time after *Pompey's Asiatic* victories; that their structure long continued very mean, and that when architecture had been much improved, the best private baths, and even those which were built for *Scipio Africanus*, were very dark and narrow. *Vitruvius* † censures these faults in all the *Roman* baths; and yet the *plans* which he afterwards exhibited, were rather imperfect sketches, and those which he executed, were too confined and obscure. But though this progress long continued slow, it became suddenly very rapid, and their princely and public baths, not only rivalled those of *Greece*, but those of *Dioclesian* were preferred to any of them, for their amplitude, more just proportion, and order.

* Ad Lucillum.

† Lib. v. cap. 10.

HOWEVER,

HOWEVER, as they had acquired these arts from the *Greeks*, they always retained their * *technical* terms, and adopted them into their language. This passion for bathing increased to such a degree, that *Seneca* says, the number of private baths in his time was almost infinite ; and the greatest part of them were so remarkable for their elegance and ornaments †, that every one thought meanly of himself, unless the walls of his bathing room were polished, and decorated with an expensive kind of stucco work.

THE state of physic continued very low at *Rome* for many ages ; rough empiric medicines, and irregular warm bathing, were chiefly used in the cure of most diseases, until some of the *Greek* physicians were encouraged to reside there. Among these, *Cleophantus* is the first who is mentioned by ‡ *Celsus*, for having introduced some useful rules in

* *Thermæ, gymnasia, palæstræ, hypocaustum, xyſti, ephedra, hemicycli, &c.*

† *Quisquis sibi pauper, et fordidus videbatur, nisi parietes balnearum magnis et pretiosis orbibus refulsissent. Ad Lucul.*

‡ *Quidam ex antiquioribus medicis Cleophantus, in hoc genere morborum, multo ante accessionem (in febre tertianâ) caput ægri multa aqua calida perfundebat deinde vinum dabat : Quod, quamvis pleraque*

the practice, and in warm bathing, with many others, which were either erroneous or doubtful; and though some of them were for some time approved of by *Asclepiades*, yet he afterwards prudently rejected them *.

In this imperfect state the art of physic remained, until † *Asclepiades* instituted a new system, who, with a singular genius, was well versed in the rules and precepts of *Hippocrates*. His cotemporaries used all their arts, to oppose his rising reputation; while others from envy, the constant attendant on superiour merit, afterwards endeavoured to lessen, or traduce it. ‡ *Galen* says he exercised a kind of arbitrary power in enforcing his rules; and *Cælius Aurelianus* charges him with being actuated with a peculiar spirit of condemning the

pleraque ejus viri præscripta *Asclepiades* secutus est, recte tamen præteriit. Lib. iii. cap. 14.

* Nullo vero quicquam, post eos qui supra comprehensi sunt, agitante, nisi quod acceperat: donec *Asclepiades* medendi rationem magna ex parte mutavit. Lib. i. cap. 1.

† Εξ αιτιολογιας. Lib. iii. de Crisibus.

‡ In curandis ægris, ambitione quadam aliorum medicamentorum præfidia, sive bona, sive mala rejicere consuevit. Lib. de Acut.

medicines prescribed by all other physicians, without any distinction, whether they were good or bad. But he was not less remarkable for his skill and success in his own profession, than his persuasive eloquence and influence over the minds of his patients: It is not therefore surprising, that during his life he was universally esteemed, and that his fame and character have been transmitted to posterity. *Celsus** particularly commends him for rejecting the use of their former medicines, which were of a rough kind, injurious to the stomach, and noxious to the blood: He substituted others, which were of a salutary and mild kind; was very moderate in the use of them, and chiefly depended on a dietetic regimen. It was a general maxim with him, when it did not immediately interfere with his principal intention, to make the diet and medicines agreeable to the stomach; nor did he ever persist in any to which they had an aversion: This precept he likewise acquired from *Hippocrates*†, who has given it a place among his Aphorisms.

* *Medicamentorum autem usum, Asclepiades ex magna parte non sine causa sustulit, et cum omnia fere medicamenta stomachum lædant, malique succi sint, ad ipsius victus rationem potius omnem suam curam transtulit. Lib. V. cap. 1.*

† Το σμικρὸν χεῖρον καὶ πόμα καὶ σιτίον, πρὶον δὲ, τῶν βελτιόνων μὲν, ἀνδρεστέων δὲ, μᾶλλον αἰρετέον. Sect. 2. Aph. xxxviii.

PLINY * in several places enlarges more particularly than any other writer on the singular sagacity and success of *Asclepiades*, which was so remarkable, that he was regarded as one † sent from heaven for the benefit of mankind: Among the many improvements which he made, he dwells more particularly on those of warm bathing ‡, and ascribes to him the invention of penile baths, which *Seneca* || gives as an instance of the utmost degree to which the Roman luxury could be carried. ¶ But *Asclepiades* § omitted no article of rendering *warm bathing agreeable*, being sensible of their peculiar *anodyne influence* on the *mind*, which is a powerful agent in all diseases: For the same reason *Athenæus* not injudiciously supposes that *Βαλλανείου* (which is a more modern Greek term for a bath) was derived from its power of *casting off all cares* or painful sen-

* Vide Plin. lib. VII. cap. xxxvi. lib. XXVI. cap. iii. lib. XXIX. cap. i.

† Univerſum prope genus humanum circumagit ac ſi cœlo emiſſus fuerit.

‡ Atque inter alia blandimenta excogitavit jam balneas inſtituendo avidiſſima hominum cupidine et alia multa dictu grata et jucunda.

|| Quarum ſuſpenſura nequid deeſſet ad luxuriam. Ad Lucull.

§ Aſclepiadis Neronis medici ætate, urbe imo tota Italia imperatrice, tum primum uſu balnearum penſilium ad infinitum blandienti.

fations from the mind *. He likewise restored the medical virtues which *Hippocrates* † had assigned to Wine when justly diluted and mixed with water.

Thus warm bathing was revived and improved by *Asclepiades*, and the use of it became more general, from its agreeable and salutary effects in the restoration of health, and in the cure of several diseases. *Galen*, who could not contain his mind within proper limits, says it was equally proper in all temperaments, whether hot, or cold, moist, or dry; and that it had often restored a *vital heat* when almost *extinguished*; and restored a *vital moisture* to others, who were parched with a burning heat. Among other instances which he gives of its preserving health, and prolonging life, he mentions *Telephus Grammaticus*, who had for many of his later years accustomed himself to the regular use of warm bathing, and lived to near the age of a hundred, in perfect health, and the free use of his limbs, and the faculties of his mind. He re-

* Απο βαλλειν τας ανιας. Lib. I. cap. xx.

† Trahebat præterea mentes artificio mirabili vinum permittendo ægris, et dando tempestive aquam frigidam. Lib. XXIX. cap. i.

peated it four times in the summer, twice in the winter, and three times in the intermediate seasons.

THE rules of warm bathing were then judiciously adapted to different constitutions and ages. *Plato* and others mention the *Senilia balnea*, and the manner of preparing and administering them. There is a remarkable instance in *Homer*, of their being particularly useful to *old men* : when *Ulysses*, after his return to *Ithaca*, found his father *Laertes* reduced to great weakness, he advised him to use warm bathing ; and, to encourage him, told him he had seen one * *whose case was exactly similar to his, worn down, and emaciated with age, who by the use of warm baths very quickly recovered his appetite and rest.* He likewise adds, that its efficacy in such cases was so well known, that it was a common custom among old men.

IN the advancing years of life, the vessels, from their continued action on the fluids, begin to contract ; and, in length of time, wrinkles must be the companions of old age. In this progress they become gradually more rigid, and incapable of exert-

* Τοῖντο δὲ εἰκάς, ἐπὶ λουσαίῳ Φαῖρος τε
Εὐδαιμονὶ μαλακός, ἢ γὰρ δίκη ἐστὶ γέροντων. *Odyf. xxiv.*

ing their *natural tone*; nor is it uncommon in extreme old age to find them *ossified*: Warm bathing, fragrant, oleaginous, and animating unguents, with very moderate exercise, and a suitable regimen of diet, are the *best* and *only* aids capable of retarding this progress, and of preserving longer the vascular system, in a more *pliable* and *elastic* state. The effects produced on these vessels by warm bathing and oleaginous frictions, bear some analogy to that which is exerted on the *dry animal strings* of some musical instruments, by rubbing on them some *resinous* materials, from which they quickly recover more active and pleasing vibrations.

THE application of these fragrant oils was not only of use in restoring, and maintaining the spring of the vessels, but in *preventing* too large a *perspiration*. Those of the fragrant and animating kind were preferred to others, and distinguished by several writers for their superior qualities; but these are very different from the more light and fragrant oils which afterwards luxury introduced to their *convivial* entertainments.

THE custom of men and women *promiscuously* bathing, had long prevailed among the *Romans*, attended

tended with several indecencies and irregularities, which were severely censured by many, but with more delicacy by *Pontanus* *, in an elegant poem : However this custom long continued, until it was forbidden by a *Censorial* law, which was succeeded by two others †, making it more penal ; by which the woman who transgressed them was liable to be *divorced*, without the privilege of *reclaiming* her portion ; and it was made *capital* to the man who forcibly or clandestinely entered into the separate baths of the women, which from that time were separated.

Hippocrates ‡ particularly directs, that *when a person is properly placed in the bath, he should continue in that situation, silent, modest, quiet, and leave to others the active parts of the perfusions, detersions,*

* Quid Thermæ, nisi lene, molle, mite ?
Hic fas est juveni, hic licet puellæ,
Certatim teneros inire lusus,
Hic et basia, morfiunculasque
Subreptim dare, mutuos facere
Amplexus licet, et jocari, &c.

† *L. Fin. C. de Repud. et in Autbelia de Repuden.*

‡ Είναι δε του λουσομενου, κοσμιου, και σιγηλου, και μηδεν αυτου εργαζεσθαι, αλλα αλλον, και καταχειν, και σμηχειν. Lib. iii. de Vict. acut. Text 43.

&c.

&c. for any kind of additional fatigue, is carefully to be avoided during the time of bathing; but *walking*, or any kind of motion, is more fatiguing in *water*, than in the *air*, in the same proportion as the gravity or *resistance* of the former is greater than that of the *air*, which is about eight hundred and fifty to one.

THIS observation and caution of *Hippocrates* is more pleasing, as it is not only an instance of his medical sagacity, but of the decency, and purity of his manners; for though there were no public baths in his time, yet the several offices of this delicate operation were generally assigned to women.

THE common custom, which now prevails, of *walking* in the public baths, must therefore be particularly injurious to *weak* persons, who are naturally apt to grow *faint* in the bath, and must certainly be more liable to it by walking; and this we find is frequently one of the bad effects of *improper* bathing. *Galen* makes a judicious observation on this *Text* of *Hippocrates*, that all motion being attended with a successive *rigid* contraction and distension of the *muscles*, counteracts the intention of bathing,
and

and oily frictions, which is to soften, strengthen, and make them more pliable.

FROM this period of time bathing regularly before supper became more general; and, with previous moderate exercise, was a salutary preparation for the *principal meal*, by carrying off any indigested remains of the former, gratefully removing any lassitude, and disposing the mind to social happiness. The frequent repetition of warm bathing was more necessary to them, as they had no linen covering next to the skin, and that of the woollen kind was more apt to increase, and longer *retain* the exhalations from it; for though bathing at length became a particular article of *luxury*, yet the *original* intention of it was only to cleanse the body, and remove lassitude after great labour or exercise; to which purpose it was so remarkably effectual, as to be *proverbially* used to express it: In this manner *Plautus* * introduces an arch servant, who magnifying his zeal and dispatch in running for his master's business, sayth that all the baths in *Athens* would not be sufficient to remove the lassitude from his limbs.

* Nunquam CEdepol omnes balneæ mihi hanc lassitudinem eximent. In *Mercatore*. Act I. Sc. i.

BUT

BUT as luxury prevailed they gradually deviated from proper rules of bathing; they increased the heat of the baths, and continued longer in them; whereby, instead of being a salutary preparation, for the principal meal, they became the *immediate scene* of intemperance; *Varro, Plutarch, Columella,* and *Seneca*, particularly exclaim against these irregularities, nor have they escaped the satirical censure of the * poets.

THE contention for fame, which then prevailed among the physicians in *Rome*, and the encouragement given to any new medicines, or mode of practice, not a little contributed to the succeeding changes in physic and warm bathing.

THEMISON, though a disciple of *Asclepiades*, became eminent by being the founder of a new system, quite opposite to what he had so successfully established, and had so many followers, that they were distinguished as a *particular*

* ——— Crudi tumidique lavemur. HOR. Ep. lib. i. ep. 6.
Turgidus hic epulis, atque albo ventre lavatur. PERS. Sat. iii.
Turgidus et crudum pavonem in balnea portas. JUV. Sat. i.
In thermis sumit lactucas, ova, lacertum. MART. lb. xii. Ep. 19.

sect * for their singular principles and rules of practice: they condemned not only the precepts of *Hippocrates*, but of all their predecessors: however, though they long flourished, they at last became so infamous for their arrogance, and want of success; that † *Juvenal* exclaims against the numbers which they had lately destroyed: *Themison* lived to be a witness of their disgrace, which was probably accelerated by his own ill conduct in a very particular instance. He was *Archiater* to *Augustus*, and attended him in an inflammatory disease, which had increased to such a degree by the warm regimen he had pursued, that his life was in imminent danger; but by the skill of *Antonius Musa*, and a regimen quite the reverse of what *Themison* had directed, he was preserved and restored to a more firm state of health, than he had enjoyed before: This recovery was so very remarkable ‡, that by a decree of the senate and *Roman*

* Adjice nunc quod pleræque artes, imo ex omnibus liberalissimæ, habent decreta sua, sicut medicina: itaque alia est secta Hippocratis, alia Aesclepiadis, alia Themisonis. SENECA Ep. xiv.

† Quot Themison ægros autumnis occiderit uno. SAT. x. v. 221.

‡ Divus certe Augustus lactuca conservatus in ægritudine fertur prudentia Musæ medici quamobrem P. R. statuam illi posuit juxta signum Æsculapii. PLIN. lib. xix. et Suetonius lib. ii. cap. lix. me-

people, a statue was erected to him near the temple of *Æsculapius*, as a perpetual monument of his skill: from this time *Augustus* distinguished *Antonius Musa* by several instances of his friendship, and esteem, as he was not more eminent in his skill in his own profession, than in his elegant taste and extensive knowledge. † The learned bishop *Atterbury* has evidently shewn, that ‡ *Virgil* has pointed at his character in that of *Iapis*, whom he describes as equally capable of acquiring, and shining in a more exalted station, but that he had preferred one more obscure and retired, where he could freely indulge his favourite studies, and in applying his healing arts particularly to the preservation of his father's health, and extending them to others: This ingenious Prelate thinks it not improbable, that *Vir-*

dico Antonio Musæ cujus opera ex ancipiti morbo convaluerat, statuam ære collato, juxta signum *Æsculapii* statuerunt.

† In a letter to Dr. Friend, to whom he applies the character which *Virgil* gives of *Iapis*.

‡ Jamque aderat Phœbo ante alios dilectus *Iapis*
 Iasides: acri quondam cui captus amore
 Ipse suas artes sua munera lætus *Apollo*
 Augurium, Citharamque dabat, celeresque sagittas.
 Ille, ut depositi proferret fata parentis,
 Scire potestates herbarum usumque medendi
 Maluit et mutas agitare inglorius artes. *Æn.* xii. v. 391.

gil had received some *recent* instances of the skill and friendship of *Antonius Musa*; as he introduces this *Episode* when the *Æneid* was hastening to a conclusion, and that he seems to have wounded *Æneas*, only with a view, of having an opportunity of expressing his gratitude to him, and of giving him a share in that immortality, which his poem deserved.

The fame, and success of this physician, were soon very extensive: he prudently applied his rules of practice to the prevailing diseases in those times; which were chiefly owing to *intemperance* and *improper hot bathing*, while he judiciously substituted in their place the use of the *cold bath*, to strengthen their enervated, relaxed vessels. By this regimen, so many were restored to a more firm state of health, that even temperate warm bathing, was, for some time, almost banished: among other instances, we find that * *Horace*, by the advice of *Antonius Musa*, had quitted his usual custom of going to *Baie* in the season, and was then in a course of cold bathing; though, at the same time, *Horace* seems to

* Hor. Ep. lib. i. ep. 15.

lament his absence from that delightful scene of pleasures, which was likewise lamented by those who frequented that place, as he always contributed to make it more agreeable.

However, as luxury continued to prevail and increase, they gradually deviated from these salutary rules; and intemperance of every kind, especially in hot bathing, was carried to the greatest excess. They not only increased the heat of the water in the baths, but added another bath of a dry and inflammatory kind, called the *Laconicum*, as the * Lacedemonians were the first inventors of it. This consisted of a concave room, into which a dry vapour, arising from burning hot bricks, was artificially conveyed, to excite what *Strabo* calls dry sweat, and *Celsus* *assæ sudationes*. In these, as *Columella* observes, the lazy and luxurious endeavoured to sweat off the excesses of the former debauches, and to prepare them for a repetition of those which succeeded: † *Seneca*, in a few words, expresses his de-

* Vitruv. lib. v. cap. 10.

† Quid mihi, inquit, cum istis calentibus stagnis? quid cum sudatoriis? in quibus fœcus vapor per corpora exhauriens includitur, ut omnis Sudor per laborem exeat. Ad Lucullum.

testation

testation of the vitiated state of hot bathing in his time, and with an honest indignation exclaims against it.

Thus warm bathing, like many other arts, had its infancy, maturity, and decay; while the medical rules which *Hippocrates* has given, to render it grateful and salutary, appeared at first in their full *strength* and *lustre*, and still retain their *Preheminence*: they have often been corrupted by some, and imperfectly revived by others, but have received no real improvement.

THERE is a remarkable obscurity in the accounts given by the ancients of the structure of the *Triclinium* in different periods; however, it is evident, that the form of it was generally circular, which surrounded a table of the same shape; that in its original and meaner state, it was called *Stibadium*, and in its more modern and improved structure, contained a less number; and that the *length* was then the double of its *breadth*; that afterwards it was raised from the ground in an *oblique direction*, whereas in the more ancient *Triclinium*, the direction of it was level, and the beds were lower than
that

that part of the table which it surrounded; that this oblique situation made the distance of the three beds from the ground very different*. *Varro*, says, that the ascent to the *lowest* part of the *Triclinium* required only one step, which he calls *Scabellum*, and a higher step to the *Second*; which he calls *Scamnum*, and *gradually* rising to the *last* and *highest*, which *Athenæus* says was equal to two cubits.—The indistinct and concise manner; in which the ancients have often applied the word *Triclinium*, sometimes to express the supper-room; and at other times the particular place, and beds, where they reclined, have perplexed many commentators; they were very different as well in their structure as use: Thus *Pliny* the Younger describes the summer and winter supping-rooms in his country *Villa*, besides two small ones which he calls *Diotæ*: Sometimes they ordered the *Triclinia* to be laid out in the † garden: But this obscurity not only appears in this instance, but in many others, where

* Quia simplici scanfione scandebant in lectum non altum, scabellum: in altiore scamnum: duplicata scanfio gradus dicitur quod geritur ab inferiore in superiorem. *Varro* de Lin. Lat. cap. iv.

† *Varro*. Lib. iii. c. 13.

terms originally *distinct*, are often indistinctly used by them, who then could easily distinguish the true meaning of them*.

BUT the part of the internal structure of the Triclinium attended with most difficulty is the make of the beds; and their situation in regard to the position of the guests who reclined on them. To illustrate this, we must consider the parts of which those beds were composed. These were the *Fulcrum*, *Sponda*, and *Pluteus*. The first consisted not only of the exterior bound or frame which supported the whole, but also of branches or partitions which fenced the bed outwardly, and also separated it into divisions, which when three lay on one bed prevented them from pressing each other. This necessary part of the fulcrum was a *transverse* partition, raised *obliquely upwards*, from the extension of the first division, which, with the pillows placed on it, was a convenient support to the shoulders and head, of those in the inferior division, while it

* Cur non sub alta vel platano, vel hac
Pinu jacentes sic temere, et rosa
Canos odorati capillos,
Dum licet, Assyriaque nardo
Potamus uncti? HOR. lib. ii. Ode xi.

defended those in the superior division, from being compressed with a weight not to be borne; as their body and head extended so far, as to be in an opposite direction to the navel, or breast of those on the superior division. This observation explains the description of *Lippius*, where he mentions that this intermediate transverse separation was made by pillows, which, in the direction he places them, would only have added to the weight.

THE *Sponda* was in general, the outward part of the bed, as may be seen in *Martial* *. In the triclinia, it supported the left elbow, on which the head reclined, and was made of various materials with convenient ornaments.

THE *Pluteus* was not properly a part of the bed, but included the whole intermediate space, between the back part of it, and the wall of the room, and likewise that vacant space which was between each division, where several waiters attended; but

* *Exciduntque senem, Spondæ qui parte jacebat;*
Namque puer pluteo vindice tutus erat. Lib. iii. Ep. 49.

those who were appointed between each division, were different from the others, and being placed at the bottom of the beds were called * *Servi ad pedes* : *Suetonius* clearly points out the situation of the *Pluteus*, and the waiters in that part of the *Triclinium*, when he describes the insolence of *Caligula*, and the servility of some senators, (who had been in the most eminent stations,) who, girded with napkins, like the other common servants, waited on him at supper, some behind, and some at the feet, between his and other beds †.

HENCE we may form a more distinct judgment of the structure of the *Triclinium*, and situation of those in it, whether in their *Accubitus*, *Recubitus*, or *Discubitus*, which we find so promiscuously used to express their *reclining* posture; though each more strictly denotes one *particular situation*: however, this distinction is not clearly expressed in any of the *Lexicons*: *Stephens* indiscriminately explains

* *Servus qui cœnanti ad pedes steterat.* SENECA. de Benef.

† Quosdam summis honoribus functos, ad essedum sibi occurrere togatos per aliquot passuum millia et cœnanti modo ad pluteum, modo ad pedes stare, succinctos linteo, passus est. In Vita Calig. cap. xxvi.

them

them in the same sense, *reclining on the elbow*; but adds, that *accumbere* is more applicable to a single person, or few guests, and *discumbere* to many: but various instances may be easily produced of *accumbere* being used where * many are collected: these terms, therefore, have no connexion with the number of guests, but refer entirely to their different situation in the *Triclinium*. Thus the *Accubitus* is particularly expressive of the *erect* posture which they always used when at supper. This is confirmed by *Plutarch*, who says, that they sometimes *inclined prone*ly forwards († as he expresses it) to reach eagerly at any thing which was particularly curious on the table. This is farther illustrated by a learned commentator on the last passage referred to from *Virgil*, where the gods are represented by him in an *erect* situation at their banquet, who observes, that this is the *true meaning* of that *expression*, and that not men, but wild

* ——— Tu das epulis accumbere Divum. *Æn.* i. 83.

Qui quotidianis epulis in robore accumbunt, Cíc. pro Muræna.
Accubationem epularum amicorum Romani, quia vitæ conjunctionem haberet, convivium nominarunt. Cíc. in Cato.

† Επὶ σοφῇ προνοεῖν ἀποβλεπούσα πρὸς τὴν τραπέζαν. PLUT. Sympf. Lib. v. Quest. 6.

beasts, indulge themselves *reclining* whilst eating; and this correct and elegant poet describes *Cerberus* in that posture*, while he continues gnawing the remaining bones of his banquet: The term likewise of *discumbere*, though frequently applied to many guests, yet strictly refers to those large and promiscuous entertainments, where many *sate* on *Carpets spread on the Ground*, unsupported by any other seats, or a *Sponda*, to recline on; while the principal persons are more eminently and easily situated on beds according to their dignity; in which manner we find that *Æneas* with the *Trojans* on one side, and the *Tyrians* on the other, were entertained by *Dido*†.

BUT though the *Recubitus* was their usual custom, except whilst actually at supper, yet at other times, especially when more attentive to the conversation, or more particularly engaged in it, they

* Janitor Orci, ossa super recubans, antro semesa cruento.

Æn. iii. v. 296.

† Jam pater Æneas et jam Trojana juvenus
Conveniunt, stratoque super discumbitur ostro. Æn. i. 704.
Nec non Tyrii per limina læta frequentes
Convenero toris jussi discumbere pictis.

Ib. 711.

versation,

raised themselves erect : Thus in *Horace* *, we find the guests after supper *reclined* on the elbow, until they were too warmly engaged in some dispute, and threatened destruction to each other. As he seems to have then been the *Rex Convivii*, he immediately calls them to order, and severely reprimanding them for their barbarous conduct, *commands* them to return to their quiet *reclined* situation on the elbow : but as they were in such a sanguinary temper, he doth not suddenly quit the subject, but, with his peculiar art and spirit, makes a transition to wounds of a more agreeable kind, and calls on the brother of *Opuntia* (who seems to have been a *principal*, and somewhat *refractory*) to toast his mistress, and name the fatal beauty †, whose arrows had pierced his heart, and made him happy by the wound. The *Discubitus* seems to be strictly expressive of a more indolent state than when reclining on the elbow, and rather more supinely resting on the pillows, with both hands disengaged. In this situation *Ta-*

* Pugnare Thracum est ; tollite barbarum

Morem : _____

Et cubito remanete pressio.

† _____ Quo beatus

Vulnere qua pereat sagitta.

Od. xxvii. Lib. i.

citius represents *Nero*, while the poison was given to *Britannicus* *.

THOUGH the *Triclinium* was capable of containing nine persons, yet so many seldom met together, except on some extraordinary occasion, and chiefly on festal days, and in large halls, where we read of some beds so large, that, instead of three, they were capable of containing from *four* to *eleven*, and even distinguished † by their different names, both by the *Greeks* and *Romans*: But in their usual entertainment ‡ *seven* was reckoned a *complete* number, and nine offensive: From hence it is evident, that it must have been inconvenient for nine, and scarce possible for a greater number to eat at the same table: § Dr. *Arbutnot* makes this observation, and says, that *Suetonius* mentions a supper given by *Augustus* to *twelve* persons, so remarkable on that account, as to be distinguished by the name of *δωδεκαῆος*; whereas the common opinion is,

* Reclivis et nescio similis. Annal. lib. xiii. cap. 20.

† Tetraclinia, Pentaclinia, Hexaclinia, Heptaclinia, &c.

‡ Quinque advocari. Sex enim convivium

Cum rege justum: si super, convicium est. *AVSON.* in *Ephem.*

§ Ancient coins, ch. v. where *Triclinium* is a bed.

that

that *L. Verus* was the *first*, who made a feast for twelve guests. The reflexion therefore of **Varro* in *A. Gellius*, that the number of guests should begin with that of the *Graces*, and not exceed that of the *Muses*, was not only just, but agreeable to the different characters and manners of the age.

BUT in their more select and elegant suppers, their numbers were not only few, but their *Triclinia* were of a less size, and were we find in the course of time, often called *Biclinia*, capable of containing two, and that frequently a single person reclined only in one of them. *Pompey*, in his third Triumph, exhibited three golden *Triclinia*, which were probably of that kind. It would be tedious and unnecessary to dwell particularly on the richness and workmanship of their *Triclinia* beds, quilts, and pillows, of the *Tyrian* purple dye, which are so frequently described by † the historians and poets.

* Lib. xiii. cap. 11.

† Arte laboratæ vestes ostroque superbo.

ÆN. I. 643.

Effultus ostro, sericisque pulvinis.

MART. lib. iii. 40.

(*Dionysius*) collocari iussit hominem (*Damoclem*) in aureo lecto, strato pulcherrimo, textili stragulo, magnificis operibus picto. Cic. in V. Tuscul. Quæst. 21. Ed. Olivet.

The

The whole *Apparatus* of the *Triclinium* was various and magnificent, expressed by the general appellation of *Ανακλινηρια* * and *περικλινηρια*. On this account the guests did not lie on them in their usual garments, but, after bathing, put on their *Vestes cœnatoriæ*, which were equally rich; the former were equally called *Vestes* or *Stragula* †.

THESE convivial dresses seem to have been like the loose kind of *Domino's* worn at masquerades, and were equally rich and elegant with the other parts of the *Triclinium*: most persons of distinction had a great variety of them, and of different colours, except black ‥; and generally came in one of their own dresses to the banquet, though the master of the feast was always prepared to supply those who came without them ‡. *Plutarch* tells a story of *Lucullus*, that being asked by the prætor to lend him some dresses of this kind for his *Chorus* in a public spectacle, which was soon to be exhi-

* Vid. *Spartian* in *Ælio Vero*, lib. vi. et ibi *CAUSABON*.

† Jam non quero unde cccc. amphoras mellis habueris, unde tantam melitensem vestem unde quinquaginta tricliniorum lectos. In *VERREM*. 4.

‡ In *Lucullo*.

¶ Quis unquam cœnavit atratus? *CIC.* in *Vatini*.

bited, told him he would enquire if he had such ; and meeting him next day, asked how many he wanted ? The prætor said a hundred ; but *Lucullus* bid him take two hundred. * *Horace* tells this story with great pleasantry, and justly censures this article of his extravagance and vanity.

THE ancient *Greeks* sat at their meals. *Homer* mentions three kinds of seats ; the first was low, and capable of containing two, which he calls διφρος : *Helen* had such in her chamber, and invites *Hector* to sit on it † ; the second θρονος, raised from the ground, to which they ascended by a footstool, called θρηνης ; *Thetis* is placed in such a one in *Vulcan's* apartment ‡ ; the third called κλισμος, raised higher, in which they could recline with more ease ; *Juno* and *Minerva* sat on such §. These, like the best *Roman Triclinia*, had a pro-

* Lib. i. Ep. vi.

† Εἰσελθε καὶ ἔζεο το δ' ἐπὶ διφρῶ. *Iliad* vi. 354.

‡ Τὴν μὲν ἐπειτα καθίσεν ἐπὶ θρόνῳ ἀργυροπλὴ Καλῇ, δαίδαλῃ. ὑπο δὲ θρήνης ποσσὶν πεν. *Il.* xviii. v. 388.

§ Αὐταὶ δὲ χρυσοῖσι ἐπὶ κλισμοῖσι καθίστον. *Il.* viii. v. 346.

jecting *Sponda*, cushion, or bed, with light quilts of the richest materials: the only difference seems to be, that half their body only lightly reclined, while their legs projected oblique downwards, on the footstool. * *Virgil*, who from *Homer* describes these seats, and their rich furniture, in several places, particularly makes *Dido*, after she had ascended to a splendid high throne, place herself in the middle of it †, reclining with ease on her golden *Sponda*; and *Æneas* riseth from his *lofty* seat, when he begins the narrative of his various misfortunes ‡. These couches, or thrones, seem to have been of different sizes, and raised to different heights, in which persons were placed according to their dignity. § *Athenæus* mentions, that *Alexander* gave a banquet to forty of his principal generals, who were placed in so many silver armed chairs, or couches, of this kind, in which they reclined occasionally. The only difference between these and

* ———— Lucent genialibus altis
Aurea fulcra toris.

Æn. vi. 603.

† ———— Aulæis jam se regina superbis
Aurea se composuit sponda, mediamque locavit.

Æn. i. 702.

‡ Inde toro pater *Æneas* sic orsus ab alto.

§ *Lib.* i.

the *Roman Biclinia* was, that in the former the superior part of the body was more lightly reclined, and their feet obliquely projected on the footstool.

THE recumbent posture of the *Greeks* and *Romans*, as it has been represented in its former state, is justly liable to many objections; but it is by no means probable, that this custom would have so long prevailed, in that flourishing period of time, when their judgment and taste were in all other respects correct and refined, had it not been attended with several very agreeable circumstances, and some *singular* benefits. A warm situation, after warm bathing, was *originally* necessary; though the succeeding principal meal was but of a short duration; but when it was extended from four in the afternoon, until they retired to rest, which was often at a late hour, where, besides the pleasures of the table and conversation, they devoted the remaining hours to various scenes of amusements and entertainments, they could not in *any other* situation have passed their time together more safely and agreeably. Neither is it to be supposed that they were confined to the couch or bed, but occa-

sionally quitted it. This is evident from several instances. * *Plutarch* observes, that in all entertainments where the consuls were present, a particular place was assigned to them, thence called *Locus Consularis*, which was next to that part of the *Pluteus*, which is between different *Triclinia*; as they were more liable to various avocations, and could more easily quit it, and return to it. In this situation likewise, after a full meal, and drinking freely, they were more safely guarded from any *partial plenitude*, and the *head* from being affected by the Wine; when the circulation of the blood was more equally carried on through the whole system of vessels, and was determined more to the inferior limbs and legs, while in this oblique, and warm situation, than if they had been so many hours in a depending position, and exposed to the cold air, from whence in long sittings, *febrile rigors*, and various acute diseases, more frequently take their rise, than from the excesses in Wine. It was with the same intention, that the use of *Crowns*, made of herbs and flowers, was first introduced in their convivial entertainments, which from their

* *Sympos. Lib. i. Questio 3.*

cooling

cooling and strengthening qualities, were supposed to be capable of fortifying the brain, and repelling the active vapours of the Wine. *Plutarch* says, that *Bacchus* was not more esteemed for being the first inventor of Wine, than of the ivy crown, which so powerfully corrected its inebriating qualities *.

WHEN we add to these considerations, the freedom and ease they enjoyed in the best constructed *Triclinia*, and the various elegant, and agreeable circumstances which attended their situation there, we shall be less surprised to find that they so long persevered in this use of them. However, they must have found this situation, on many accounts, inconvenient. Neither were they insensible of it. *Plutarch* makes this observation, though he only mentions that nothing contributes more to animate the conversation, than seeing the visible impression it makes on the countenance, which, when their faces were in the same direction, they were in a great measure deprived of (especially such as were in the superior division of the *Triclinium*.) This

* Symp. Lib. iii. Quest. 1.

reflects

reflects a new pleasure, and is often the most sincere and best interpreter of their sentiments.

WINE was a material article, without which the most splendid entertainment must have been insipid. As the qualities and preparations of their principal Wines have been sufficiently described, it will be less difficult to make a few necessary observations on some convivial customs which then prevailed, and rendered those entertainments more useful and agreeable.

THERE was a particular part of the convivial room assigned for the reception of the Wines, which with various vessels, and drinking cups, were distinctly ranged on a table called *Αἶξ*, or *Abacus*; of which we have no other description, than that it was generally of marble, of the form of a long square, not unlike our modern side-board; but must have been very large, from what *Philo Judæus* says of the number of vessels placed on it. The magnificence of these side-boards was not only in that apparatus, but in the ornaments of the table, which were often silver, and supported
by

by figures *. † *Pliny* speaking of the rich spoils exhibited by *Pompey* in the triumph he obtained for his victories over the pirates, says, that the number of drinking vessels of gold adorned with jewels, was sufficient to furnish nine *Abaci*. ‡ *Cicero* charges *Verres*, among his other rapines in the provinces, with having plundered the *Abaci*. These, among other articles of luxury, were imported from *Asia* §; and from being at first conveniencies only, became necessities, and that even to the poorer

* Abacum argento ornari vidimus. Varro de Lin. Lat. lib. viii.

Recubans sub eodem marmore Chiron. Juv. Sat. iii.

† Triumpho quem de piratis, Asia, Ponto, ——— egit, transtulit lectos tricliniarios tres: vasa ex auro et gemmis abacorum novem. Lib. xxxvii. cap. 6.

‡ Vasa omnia ut in abacis erant exposita, abstulit. Cic. in Verrem.

§ Livy, lib. xxxix. sect. 6. The whole passage is so instructive, as well as beautiful, that I shall insert it.—Luxuriæ enim peregrinæ origo ab exercitu Asiatico investa in urbem est. Ii primum lectos æratos, vestem stragulam pretiosam, plagulas et alia textilia et quæ tum magnificæ suppellectilis habebantur, monopodia et abacos Romanam advexerunt. Tum psalteriæ sambucistræque et convivialia ludionum oblectamenta addita epulis: epulæ quoque ipsæ et cura et sumptu majore apparari cœptæ; tum coquus, vilissimum antiquis mancipium, et æstimatione et usu in pretio esse; et quod ministerium fuerat ars haberi cœpta. Vix tamen illa quæ tum conspiciantur, semina erant futuræ luxuriæ.

fort,

fort, who imitated the elegances of the rich. *Juvenal* * humourously describes one of this latter kind.

It was usual among the *Romans* to observe a custom, which had long prevailed among the *Greeks*; of chusing a president of the feast. † He had various appellations, by which his dignity and power were distinguished; but his principal office was to prevent any irregularities, and to direct the conversation to such subjects as were most useful and agreeable, in such a manner, as promoted their benevolence, and mutual happiness. He was generally chosen by casting lots ‡, and often appointed by the public voice. § *Cicero* makes *Cato*

* Lectus erat Codro Procula minor, urceoli fex,
Ornamentum abaci, necnon et parvulus infra
Cantharus, et recubans sub eodem marmore Chiron.

Sat. iii. 204.

† Βασιλεὺς Συμποσίου. Rex convivii. Symposiarchus. Plutarch.
et Modimperator. Varro. Rer. hum. lib. xx.

‡ Quem Venus arbitrum dicet bibendi? Hor. lib. ii. Ode 7.
Nec regna vini fortiter talis; lb. lib. i. Ode 4.

§ Me vero magisteria delectant a majoribus instituta, et is sermo
qui more majorum a summo adhibetur magistro in poculo. Cic.
de Senect.

express

express a peculiar delight in this kind of convivial government ; his dictates were absolute, and religiously observed ; but they were generally agreeable, and seldom exerted, but to order more generous Wine, and larger glasses. * The same author says, in some other place, that *Verres*, who never regarded the laws of the state, punctually obeyed every one given by the president of the feast.

THE office of the head butler was of great importance, and required judgment and experience to discharge it. He was likewise distinguished by different names, and is called by *Pollux*, † *Οινοντης*. His principal business was to *inspect* into the state of the Wines, before and after they had been prepared, and mixed in another apartment, from whence they were before supper carried to the *Abacus* ; where he presided, and delivered his orders. He had likewise a frequent intercourse with the president of the feast, whenever any change

* *Iste Prætor Severus ac diligens qui populi Romani legibus nunquam paruiisset, iis legibus quæ in poculis ponebantur obtemperabat. In Verrem. 5.*

† *Lib. vi. cap. 3.*

was to be made in the Wine, or manner of drinking it.

THE next in office under him was the principal *Pincerna*, who was well versed in the manual operation of his office; and is thence called *οἰνοχοός*, by * *Xenophon*. He received all his directions from the *former*, and executed them in such a manner, that the Wines were regularly prepared, and distributed to the guests by the inferior *Pincernæ*. Of these there were many degrees. One part of the luxury of the times was to be served by beautiful boys, which were purchased at very high prices; these therefore served the master, and those guests who were of superior rank and wealth, whilst the poor, or parasite (some of the latter were generally admitted, to be the butt of the joke) were served by cheaper slaves, mostly *Africans*, employed in common work, and therefore coarse and disagreeable to sight and smell; the dear-bought *Ganymede*, sharing the insolence of his lord, would not have deigned to serve such guests. This part

* Xen. Hell. 7.

of the *Roman* manners is highly painted by *Juvenal* in his *Satire on Parasites* *.

NOTWITHSTANDING the regular disposition of these convivial attendants, many mistakes happened in the mixture of the Wines; they were almost unavoidable, when the guests called for Wines variously diluted for their common drink, either with *hot* or *cold* water, or whatever kind of strong Wine was most agreeable. They were then under no restraint; for the president of the feast was never appointed, until the *eating table* was first removed, and another with a bowl of Wine, and a *desert* on it, was brought in, which remained, and the greatest part of the attendants disappeared †. This was the general manner in which their suppers were conducted, however they differed in fe-

* ————— Tibi pocula cursor
Gætulus dabit, aut nigri manus ossa Mauri:
Flos Asiæ ante ipsum pretio majore paratus
Quam fuit et Tulli census pugnacis et Anci.
————— Quod cum ita sit, tu Gætulum Ganymedem
Respice, cum fities: nescit tot millibus emptus
Pauperibus miscere puer. Sat. V. ver. 52 to 63.

† Post quam prima quies epulis mensæque remotæ
Crateras magnos statuunt vinaque coronant.

VIRG. ÆN. I. v. 727.

veral circumstances. Several individuals in these times possessed immense fortunes, where no expence was wanting, not only to make them magnificent, but in every other respect convenient; and even their select suppers, though less profuse, were rather more elegant in their convivial amusements, in their Wines, and in the manner of drinking them. * *Cicero* describing a supper of this kind, alludes to the *Symposium* of *Xenophon*, where the Wines were exquisitely prepared by hot water, and afterwards cooled in snow; and *Socrates* recommends the manner of drinking them in small glasses, which he illustrates with several just and beautiful observations.

THOUGH these convivial suppers were more frequent in those times, and so many hours were devoted to them, yet several chose rather to sup at home with their own families, and a few particular friends, when, after supper was over, they quitted the *Triclinium*, and retired to a more elegant apart-

* Et pocula sicut in Symposio Xenophontis minuta atque rorantia et refrigeratio in æstate, et vicissim aut sol, aut ignis hiernus. De Senect.

ment, where unrestrained they passed their time in whatever manner was most agreeable to them.

* *Cicero*, who expressed so much delight in convivial suppers, yet gives it as an excuse for declining an invitation, that it was not *usual* with him to sup any where but at home; and *Horace* expatiates on the felicity of those most agreeable suppers, not conducted by the dictates and rules of a president, but where every one conversed and drank as he pleased †.

WE find from the most early times, that the Wines in their convivial entertainments were always mixed with water, of which we have repeated instances in *Homer*; but though the exact proportion of each is not mentioned, yet it is certain that there was some *general standard*; from which, however, they occasionally deviated. Thus

* Ego si foris cœnarem Octavio familiari tuo non defuissem.
Lib. vii. Ep. 16. ad Fam.

† O noctes, cœnæque Deum! quibus ipse meique
Ante Larem proprium vescor—————
————— cum ut cuique libido est,
Siccat inæquales calices conviva solutus
Legibus insanis.

Lib. ii. Sat. vi. v. 65.

when

when *Ulysses*, *Ajax*, and *Phœnix*, were deputed by *Agamemnon* as ambassadors to *Achilles*, to prevail on him to return to the army, *Achilles*, though incensed against the king, received them in a friendly manner; and as they were more fatigued after a long journey, and *Phœnix* advanced in years, he ordered *Patroclus* to prepare a bowl of Wine*, mixed with a greater proportion of pure Wine, which he distinguished by the expression of ζωρολερον κρασις; and as he likewise mentions that the *Pramnian* Wine required a greater quantity of water than any other Wine to reduce it to the common standard, it is not improbable that they were differently mixed, according to their degree of strength; and this seems to be confirmed by *Hippocrates*, who first applied Wines to medical uses, and has divided all the *Greek* Wines into two general classes, of such which will bear a large or a small quantity of water.

WE may easily trace from *Homer* several rules relative to the manner in which the ancient *Greeks*

* *Iliad* ix. ver. 200.

—— *Patroclus*, crown a larger bowl,

Mix purer wine, and open ev'ry soul.

POPE.

prepared

prepared and drank their Wines ; but as this changed with the customs of the times, it is very difficult to ascertain those which afterwards prevailed. * *Plutarch* has mentioned three different kinds of mixtures, from thence, in one of his *Symposiac* questions, he has endeavoured to explain an old proverb, which has divided the opinions of some of the most eminent authors. He refers the πεντε, or *five*, to that mixture, which consisted of three parts of *water*, and *two* of pure Wine ; and the τρια, or *three*, to that which consisted of *two* parts of *water* and *one* of Wine ; and the fourth, to that which consisted of *three* parts of *water*, and *one* of Wine. *Ariston* says, rather humourously than seriously, that these proportions were deduced from the harmonic agreement, which is between them and the lyric measures. *Plutarch* farther observes, that the *first* mixture, or πεντε, was lightly *intoxicating* ; the second generous, and more mildly *composing* the spirits, but the fourth *inactive*, and therefore seldom used but by the rigid philosophers at *Athens*, who resided in the *Prytanæum*.

* Sympos. lib. iii. quest. 9. η πεντε wineiv, η τρια, η μὴ τετραα.

ATHENÆUS gives several instances from the poets, which agree with the measures of *Plutarch*, and others which, in some respects, differ from them. Among these he mentions a mixture very different from the *μεντε* of *Plutarch*, which was called *μεντε και δυο*, which consisted of *five* parts of pure *Wine*, and *two* of water. This cup was often called for by those who were particularly devoted to *Bacchus*, which he confirms by several instances, and particularly from * *Eupolis* and † *Anacreon*.

EUSTATHIUS interprets this proverb in a different manner from *Plutarch*. He agrees with him in the *μεντε* and *τετρα*, but thinks that the *τετραρα* is a mixture consisting of equal parts of Wine and water; the same as the *ισο-ισο* of *Hippocrates*. Others have explained this proverb as relative to

* *Salve Bacche, num quinque et duo bibemus?*

† Age puer affer nobis pateram
 Haustu præ bibam ut uno
 Affusus aquæ, cyathos duos,
 Vini quinque cyathos;
 Ut petulanter vino madidus
 Agar furore, more Bacchanalium.

Lib. x. cap. 7.

the number of glasses, or the quantity of Wine taken at one sitting. *Pliny* says that *Democritus* wrote a volume to prove, that no one ought to exceed the fourth or sixth glass; and * *Eubulus* says, that an excess in the former will produce *ebriety*, and in the latter *insensibility*.

THE drinking cups †, or glasses, (for such they had, though some more pellucid than others), were composed of various materials, and were of different sizes, which decreased in a regular proportion, and *similar* to the parts of a vessel of a larger capacity. Instances have been given of some persons, who have drunk in one draught a *Congius*, or gallon of Wine; but these must be uncommon. The *Congius* contained ten Roman pounds; the *Sextarius* was a vessel, which contained $\frac{1}{2}$ of a *Congius*, that is, twenty ounces; and the several parts of the *Sextarius* were like those of *As*, *Uncia*, *Sextans*, *Quadrans*, *Triens*, *Quincunx*, *Semis*, *Septunx*, *Bes*, *Dodrans*, *Deunx*;

* In *Athen.* lib. x.

† Nos bibimus vitro tu myrrha. MART. lib. iv. Ep. 41.
Cum tibi Nilivus portet. crystalli. Ib. xii. Ep. 75.

by which words, a certain number of *Cyathi* is meant, as the *Cyathus* was the twelfth part of the *Sextarius*. These measures of the ancients have been described by them, and others, in a perplexed manner, and continued obscure, until * Dr. *Arbuthnot* ascertained their real quantities, without which elucidation, the knowledge of their measures of capacity, or doses of medicine, could not be ascertained.

† THEY all are mentioned by the poets, but more frequently the *Deunx*, *Triens*, and *Sextans*. The *Deunx* was seldom called for, but by such as were noted for intemperance; the *Sextans* was the most temperate; but the *Triens*, which was moderately generous, is most frequently mentioned by them ‡.

* Chap. i. ix.

† Quincunces et sex cyathos besselque—MART. lib. xi. Ep. 37.

Poto ego Sextantes, tu potas Cinna deunces,

Et quereris quod non, Cinna bibamus idem.

Ib. lib. xi. Ep. 28.

Cum fuerit multis exacta trientibus hora. PROP. lib. iii.

Sed nec post primum legat hæc summumve trientem,

MART. lib. iv. Ep. 38.

‡ Vide MARTIAL, lib. i. iv. x. xi. xiv.

THIS

THIS regular proportion will appear more evident from a line of * *Martial*. Two *Sextantes* were $\frac{2}{3}$ of the *Sextarius*, or four *Cyathi*. According to *Cornelius Nepos*, *Augustus Cæsar's* highest debauch in Wine was *six Sextantes*, a little above our pint, which he could not exceed without vomiting.

ATHENÆUS observes that the *Scythians* were more distinguished than any others for their love of strong Wines, and drinking them freely; and that *Cleomenes*, after having lived for some time among them, and accustoming himself to their manner of drinking, was so far deprived of his senses, that on his return to *Sparta*, he was thought unfit to reign. But it is very evident that their mixtures were not of the strongest kind, as they were called *ακρατερον*, which *Hippocrates* distinguishes as a more generous mixture than the *ακρατον*, and a degree less than the *ακρατεστατον*; but this is the degree of strength which was † assigned to the *Scythian* measures; on which account the term *επισκυθιαζειν*, or calling for Wine of the same strength with the *ακρατερον*, were reckoned synonymous. It is there-

* *Sextantes Caliste duos infunde Falerni.* Lib. v. Ep. 65.

† Οθεν εταν βελωνται πινειν ακρατερον, επισκυθιστον λεγεται. Athen. lib. x.

fore probable, that they were not so remarkable for the strength of their measures, as for repeating them till they were drunk ; as we express that kind of drinking proverbially, *to drink like a Dane* *.

FROM the accounts we have of the extraordinary strength of some of the *Greek Wines*, and the large quantity of Water, which many of them required to reduce them to a proper standard ; it is very evident that they never drank in their regular entertainments any of these strong Wines entirely *pure*, and unmixed with water, as they must have soon else destroyed the social intention of drinking ; and it is very probable that from their natural heaviness and taste, some mixture was necessary not only to make them more salutary, but grateful.

THOUGH the strength of their mixtures is somewhat uncertain, yet, from those given by *Plutarch*, the proportion of water in the strongest exceeded that of pure Wine ; and though they often deviated from these rules, yet the excess was not generally in any great degree. We find likewise that in their most ele-

* *Hamlet* ; and *Congreve's Way of the World*.

gant entertainments, whenever they chose to drink more freely, the president did not order an additional quantity of Wine to be mixed, but * to bring in larger cups, or more generous Wines; but though they often drank very freely, yet no one was obliged to drink, or to stay; but if he did not chuse to drink more, was at liberty to depart. This was an old convivial rule, *Aut bibe aut abi.* Several among them were able to drink very freely, without being inebriated, or improperly affected; and in popular governments this prevailing strength of the *nervous system* often gave those who possessed it a superiour advantage over others, in discovering their *favourite* passion and sentiments, while they concealed their own. *Socrates* possessed this power in an eminent degree; for whether he lived abstemiously, or drank Wine with the greatest freedom, he was equally unaltered. *Cyrus*, among other reasons which he urges to gain the preference to the crown, before his elder brother, particularly insisted on his being able to drink a larger quantity of Wine, without being

* *Capaciores affer hue puer scyphos*
Et Chia Vina aut Lesbica.

HOR. Epod. ix.

inebriated,

inebriated, or his passions disagreeably excited; for *Artaxerxes* was liable to these infirmities. Neither was this qualification, and the prudent exercise of it, esteemed by the *Asiatic*, despotic kings, an unnecessary ornament to their crown.

* *Athenæus* mentions, that *Darius* desired no greater encomium should be engraved on his tomb, than that he was able to drink a large quantity of Wine, without being *inebriated*. How much more happy would *Alexander* have been, if by possessing this qualification, he had not killed his honest friend *Clytus*, which sullied all the glories of his reign, and private virtues; for his natural disposition was temperate and generous; and he † challenged *Proteus* to this *debauch*, more from a vanity of *excelling* in every thing, than from a love of Wine. Thus he fell a victim to this ignoble ambition; and before he had finished the draught, the cup falling from his trembling hand, he dropped senseless on his pillow, and soon after expired. *Persius* seems particularly to allude to this circumstance of his death ‡.

* ΗΔΥΝΑΜΗΝ ΚΑΙ ΟΙΝΟΝ ΠΙΝΕΙΝ ΠΟΛΥΝ
ΚΑΙ ΤΟΥΤΟΝ ΦΕΡΕΙΝ ΚΑΛΩΣ. Lib. x.

† Sed tremor inter vina subit calidumque triental

Excutit è manibus.

PERS. Sat. iii. v. 100.

FROM

FROM hence the custom, I have before mentioned, of wearing crowns in their convivial entertainments took its origin, which were composed of leaves and flowers, to which the virtues were ascribed of cooling and strengthening the brain, and of repelling the vapours of the Wine; by which means they were able to indulge themselves more freely, without being inebriated. *Homer* mentions crowning the bowl of Wine, but not the guests; and *Virgil* *, who imitates his descriptions of the *Grecian* manners in his *Æneid*, observes the same ceremony in the feast which *Dido* gave to *Æneas*. However, we find that this custom early prevailed among the *Asiatics*, and was derived from them to the *Greeks* and *Romans*, and became at last so general, and of such importance, that *Asclepiades* wrote a treatise on their virtues; and *Theophrastus* has given a list of those which were most esteemed and valuable, which he calls *Coronariæ*. † *Athenæus* mentions their different kinds of crowns, and among them one of a particular kind,

* See note †, p. 323.

† Lib. xiv. cap. 10.

called

called *χυδαία*, or *Tumultuaria*, with which they sometimes crowned those who were drunk and troublesome, and exposed them in that manner. This was not, like the former, composed of beautiful leaves and flowers regularly connected, but of some of the vulgar kind, more confusedly placed. It was certainly a crown of this kind which the servant in * *Plautus* said he would put on, with an intention of being reputed drunk; for the others were ornamental, and prevented drunkenness, and were used and esteemed not only for their virtues, but for their fragrantcy and beauty, and became at last a distinguished article of expensive luxury. The myrtle crown was generally used unadorned, and was much esteemed for its fragrantcy, and strengthening qualities, as well as the firmness and beauty of its foliage. But in their elegant entertainments, the most expensive flowers in season, and even when more scarce, were curiously interwoven with the myrtle. *Horace* strongly expresses his aversion to this kind of effeminate luxury, in an

* *Capiam mihi coronam et assimilabo me esse ebrium.* In *Amphytr.*

Ode †, where he strictly orders his boy to prepare crowns for his guests of *simple myrtle*, unadorned with any of the expensive flowers, especially the *late rose*, which on that account was particularly esteemed; and he seems to have written this ode with a view of censuring those of affluent fortunes, who encouraged this prevailing luxury, in others of a more humble station; who, like him, ought to be contented with this single ornament: This appears more probable, as *Horace*, on other occasions, was particularly delighted with these convivial crowns, and various decorations ‡.

THESE crowns were never worn till after supper; any of the guests might then call for his crown. The president sometimes ordered particular persons

† Perficos odi, puer, apparatus.

Displicet nexæ philyra coronæ:

Mitte sectari, rosa quo locorum

Sera moretur.

Simplici myrto nihil allabores

Sedulus cura.

Carmin. Lib. i. Ode 38.

‡ Neu defint epulis rosæ,

Neu vivax apium, neu breve lilium. Lib. i. Ode 36.

to be crowned, but more frequently the whole company.

To answer the same intention of repelling the vapours of the Wine, and of strengthening the brain, various *aromatic unguents* were likewise used. *Homer* was not unacquainted with them; but in his time they were not used in their convivial entertainments, but constantly after warm bathing. He particularly mentions an unguent prepared by *Venus*, of an *ambrosial* fragrantcy, well impregnated with that of *roses*, with which the dead body of *Hector* was anointed. These likewise degenerated into an article of great expence, and effeminate luxury. The best were of a more liquid kind, which they profusely poured on their crowns, and not only applied them to their temples, but to their necks and arms, which are often censured by the *Greek* poets in their comedies. *Cicero* charges *Verres* with wearing crowns of this kind both on his temples and head †. *Herophilus* wrote a particular treatise on their medical virtues, and mentions the several cities in *Greece*, which were par-

† In se autem coronam habebat, unam in capite alteram in collo. In Ver. V.

ticularly

ticularly famous for preparing them, and that some of them were sold at a great price. *Virgil* seems to have been very fond of them, and supplied with a large quantity of the more fragrant kind, which were very different from those commonly used and kept, as * *Horace* says, in large shells; but when he invites *Virgil* to supper, he intreats him to bring with him a *small* box of his † fine *unguent*, which is more valuable than the best *Amphora* of Wine. Some commentators on this Ode have doubted whether it was addressed to *Virgil*, the poet, or some eminent perfumer; but no one had a better right than *Virgil*, to indulge himself freely in any *expensive* article; as he had a larger fortune than poets generally possess, and died worth more than eighty thousand pounds.

THE *Symposia* of *Plutarch* and *Athenæus* are to be regarded chiefly as a general history, or system,

* Funde capacibus

Unguenta de conchis. Carmin. Lib. ii. Ode vii. v. 22.

† Nardo vina mereberis.

Nardi parvus onyx eliciet cadum,

Qui nunc Sulpitiis accubat horreis.

Ibid. lib. iv. Ode xii. v. 16.

of the various convivial customs, which prevailed in different countries, and at different periods ; but they leave no regular impression on the mind of any *Symposium*, in which all the principal rules necessary to render it completely useful and agreeable, were collected in one distinct view. I shall therefore make a few observations on the celebrated *Symposia* of *Plato* and *Xenophon*, in which each of them proposed to exhibit a perfect *model* of this kind ; the one for the beauty of his style, and sublimity of sentiments, called *divine* ; and the other, with equal justice, distinguished with the title of *Apis*, and *Musa Attica*.

THOUGH the *Athenians* were eminent for their taste and manners, yet in *Athens*, as well as *Rome*, they widely differed in the pleasures of the table, conversation, and choice of the guests. However, before we can form any true judgment on these performances, it will be farther necessary to observe, that a jealousy had long prevailed between *Plato* and *Xenophon*, which subsisted at the time when *Plato* published his *Symposium*. This excited *Xenophon* to write another, which should be

not

not only more agreeable to his taste, and the established convivial rules, but should also afford him an occasion to vindicate the character of some of his friends, whom *Plato* seemed to have pointed out, and censured in his *Symposium*; and indeed the latter differs from that of *Plato* almost in every respect.

THEY had been long rivals in fame, and their opposition in sentiments appears not only in this instance, but in two other learned treatises, which, though nearly relative to the same subject *, yet contain a studied difference of opinion, easily discerned in them. *Xenophon* says that *Cyrus* was early instructed and versed in the rules and principles of government; *Plato* asserts, that his education was entirely military, and that he was so much unacquainted with them, and even with his domestic affairs, that he committed the education of his children to women. *Xenophon* represents *Mnemon* as a betrayer of the *Greeks*, in their expedition against the *Persians*; *Plato* not only vindicates his conduct, but greatly commends it. Many more in-

* De Legibus; and, De Institutione Cyri maj.

stances of this kind will occur to those, who are acquainted with their writings, in which it is particularly remarkable that though they were cotemporary, and wrote on the same subject, *Xenophon* but once, and then very slightly, mentions the name of *Plato*, while he never inserts that of *Xenophon*, though it was almost unavoidable upon one occasion, where he enumerates every one then present, except him. Hence it is plain that each cautiously avoided giving to the name of the other that share of immortality, which the works of both of them deserve.

IN *Plato's Symposium* the number of the guests, besides *Agatho*, the master of the feast, is seven, all of them eminent in their different characters. After the eating tables are removed, the conversation is for some time general; and *Erixymachus*, the physician, proposes that they should be moderate in their cups, and every one left at liberty to drink as he pleases; to this they all agree, as some of them had the day before drunk freely at an entertainment given by *Agatho*. He then proposes that a female musician, which
had

had been introduced, should be sent away, and the evening enjoyed in conversation: Love was the subject proposed; and *Phædrus* first expressed his sentiments on it, and after him *Pausanias*, *Eriymachus*, *Aristophanes*, and *Agatbo*; where each of them expatiates on the various objects, and power of it, in a *style* and *manner* suitable to their different characters. Before, and in the intervals between these speeches, the conversation is elegantly and agreeably varied, until it comes to the turn of *Socrates* to speak his sentiments, or rather those of *Plato*, on his favourite subject. He begins with enumerating its various origin, and power of attraction, which he *reduces* to whatever is *good*, and beautiful, and proceeds to extend it, from *one* beauteous object to many, and from the beauty of *bodies*, to that of *souls*; and from the beauty of *souls*, to that of *arts*; and from the beauty of *arts*, to that of *sciences*; until at length from sciences, to *that science* which is no other than of—*the beautiful in itself*. Thus by a regular chain of arguments he clearly evinces the *eternal existence* of one *supreme good* and *beautiful*, the *immortality* of the *soul*, and the *certainty* of a *future state*. He
 very

very *artfully* introduces *Diotima*, a famous prophetess, instructing him, while he delivers these *divine* sentiments; and indeed he appears not only as exerting the utmost powers of the *finest natural genius*, but rather as speaking from *inspiration*.

HAD this *Symposium* ended with the speech of *Socrates*, it would be *justly* considered as a perfect model of that part of it, which depends on an *agreeable, elegant, and useful* conversation, especially when the guests are philosophers, and their principal view is to indulge in a *banquet of the mind*.

BUT the remaining part of this *Symposium* becomes the reverse, contrary to the proposal of *Phædrus* and *Erismachus*, to which they had all agreed; for the company, instead of continuing select, becomes promiscuous and irregular, by the admission of *Alcibiades*, and several young *Athenian* noblemen; when *Socrates* immediately calls for a large bowl of Wine, and *Alcibiades*, almost inebriated before, delivers his sentiments on love, which are too obscenely shocking to be mentioned, and ought to be erased from *Plato's* works. Neither

ther are the sentiments of *Pausanias*, which are assigned to him in his former speech, mentioned in any part of his writings, or by any other author ; and at last, after the rest of the company departed, *Socrates* remains with *Agatbo* and *Aristophanes*, drinking in large glasses until morning.

In the *Symposium* of *Xenophon*, *Callias*, who is master of the feast, returning from the equestrian games, accidentally meets with some of his friends, and asks them to sup with him ; after hesitating for a short time, they accepted his invitation, and promise to come after they had bathed. The company consists of *Socrates*, *Charmis*, *Nicestratu*s, *Cletobulus*, *Hermogenes*, *Antisthenes*, and a beautiful youth called *Autolycus*, with his father. He receives them with a friendly warmth, and declares that he should be more happy in seeing his table adorned with persons of their character and integrity, than with princes, and others in the highest station, who have no other merit to recommend them. Some time after, while they are at supper, *Philippus*, a fellow of agreeable wit and humour,

who never waited to be invited, but was sure of being welcome wherever he came, is likewise admitted among them.

AFTER the tables are removed, and the usual *libations* made, a noted *Syracusan* master, with his company of musicians and dancers, is introduced, and continues during the whole time. These consist of an elegant female musician, a dancer, and a beautiful boy, who excels in playing on the harp, singing, dancing, and the performance of several surprising feats of activity. After they have given a short specimen of their skill, *Socrates* pays a compliment to *Callias's* taste, in making a good supper more agreeable by a succession of so many delightful circumstances, and *αγκισματα*, ever necessary to make any entertainment more chearful and agreeable. *Callias* then asketh him if he chuses to have any fragrant ointments brought in, which *Socrates* not only refuses, but makes several objections to the use of them. Soon after he takes an opportunity of calling for Wine, and proposes drinking it in small glasses, not that he was averse to a liberal and free use of Wine on that occasion, but that by drinking

drinking small glasses, they would be gradually more animated, and incited to repeat them more frequently, by which means they should continue revived, and longer happy together. This he beautifully compares to repeated gentle showers, which enliven plants and flowers, raise them, display their various beauties, and diffuse their fragrantcy, which by heavy and repeated rains droop, lose all their virtues, and are oppressed; as the body and mind are, by repeated draughts in large glasses.

AFTER music, Wine, and various scenes of mirth, have concurred to make some part of their time pass away very agreeably: They still continue to give their attention to them, particularly to the surprising equilibres shewn by the boy, and his skill in preserving his center of gravity in various and dangerous positions of body. *Socrates*, who till then had equally shared in them, observes, that though he greatly admired their performances, yet it was a kind of reproach on them, to owe their happiness entirely to such diversions; when, from their own superior powers, they were capable of exciting a greater, and of a more solid kind. When

several ask him in what manner he proposed to obtain it, he answers, by *Callias's* performing the conditions on which he had engaged him to sup there; that he would instruct him in that kind of wisdom which he possessed. *Callias* said, he was ready to perform his promise, if each of them would openly declare what he particularly esteemed to be *Good*, and *Why*. This was an observation worthy of *Socrates*, to shew that no *Symposium* could be complete, without an agreeable and useful conversation. The proposal is agreed to, and thus is opened a field, which affords a variety of curious observations, highly seasoned with *Attic* wit and humour. Soon after *Socrates* makes a short speech on love; while the *Syracusan*, in another room, prepares a musical interlude of *Bacchus* and *Ariadne*. When this was ready, they are called in to see the performance, which they are much delighted with; and after all, they have sufficient time to take an evening walk together.

THUS endeth the *Symposium* of *Xenophon*, which may be justly considered as a complete *model*, where no circumstance tending to make it perfectly

feely agreeable and useful is *omitted* ; and is a true representation of the entertainments which prevailed among persons of taste at *Athens* ; differing, in their simplicity, from others of greater magnificence ; and whose additional customs and forms rather make them more disagreeable.

In *Plato's Symposium*, crowns are given to *Agatho* and *Socrates* ; in *Xenophon's*, *Socrates* rejects the fragrant unguents, which *Callias* proposeth to him ; and as the crowns were usually sprinkled with them, none are called for. In *Plato's Symposium*, there are neither singers nor dancers, and the musician is in the beginning ordered to retire, until called for ; in *Xenophon's*, the music and songs are occasionally repeated during the whole entertainment, and the whole company often joins in the *chorus* ; at one time *Socrates* begins a song, and the rest immediately accompany him, and the entertainment concludes with a musical masque. In *Plato's*, after midnight, the company increases to more than twenty, and some of them continue drinking till morning ; in *Xenophon's*, the number of guests continues equal, no intemperance is introduced, and they part at a seasonable hour.

HOWEVER,

HOWEVER, *Plato's Symposium* is not to be viewed in the same light with that of *Xenophon*, which, through the whole, is uniform, and agreeable to his taste ; whereas the latter part of that of *Plato*, is to be considered as what the author disapproves ; and rather a satirical reflection on the various irregularities, which at that time generally prevailed among the *Athenian* noblemen, and particularly in their conversation ; and the former part exhibits a perfect model of that kind, in which he expresses his real sentiments. And indeed his manner of living, and conversation, were exactly conformable to them ; his table was always elegant without profusion ; and it was usual for those who had supped with *Plato*, to acknowledge the next day, that they always received a double benefit from his entertainments ; where not only their appetites had been most agreeably gratified, without impairing their health, but also a pleasing and lasting impression had been made on their minds, by his conversation.

THE *Symposia* of *Plato* and *Xenophon* have not improperly been regarded as dramatic narrative performances ; and the indelicacy and impropriety of

of the sentiments in some parts and characters of the former, have been severely censured, especially in those he gives to *Socrates* in the latter part; which are so inconsistent with those he had supported with so much dignity before, that they are more suitable to the character of a buffoon or drunkard, and seem designed to point out that there was in his character something of this kind.

BUT though *Socrates* often drank freely, and frequented the company of *Alcibiades*, who had been his favourite pupil, and sometimes of others, who delighted in a life of luxury, he never promoted it in others, or was inebriated; nor was his conversation ever directed to encourage vicious habits, but to reform them; and though *Alcibiades* had been too much immersed in the prevailing vices of these times, yet he was distinguished for many amiable and generous, as well as shining qualities.

XENOPHON, therefore, takes this opportunity of vindicating the character of *Socrates*, which he was sensible had been obliquely censured by *Plato*; and for that purpose particularly distinguishes him in his

his *Symposium*, as the first who proposes drinking out of small glasses, and with the most persuasive eloquence recommending the proper manner of drinking Wine in these convivial entertainments, and with the same force of reasoning dissuading them from the intemperate use of it, which entirely destroyed the intention of them.

THOUGH a friendship had long subsisted between *Plato* and *Socrates*, *Xenophon* was not the first who observed this jealousy in *Plato*; others have given stronger proofs of it, and shewn that *Plato* envied that peculiar great character, which was justly and universally assigned to him. *Plato* was particularly fond of fame; it was his ruling passion; and such is often the delicate mechanism in the minds of some, who are blessed with the finest genius, which necessarily prompts them to excel;—and when they have attained that favourite point, they become, from the peculiar tenderness of their *nervous system*, incapable of bearing the bright reflection of any mirror, which in the least diminishes the splendor of their own. *Plato* was in the constant pursuit of fame and fortune, and acquired both. *Socrates* was
never

never ambitious of fame, but it followed his virtues, and fortune he always despised.

He certainly loved and admired *Plato*; but though unsuspecting in his temper, he was at last not insensible of *Plato's* prejudice against him. This is evident from several passages in *Athenæus*, relative to *Socrates* and *Plato*. Among others, he mentions the remarkable dream of *Socrates*; and in several places insinuates that *Plato* was rather disposed to censure than praise those who had been distinguished for superior merit, and instances his seeming antipathy to poets, which he carried so far as not even to allow *Homer* a place in his *Republic*. This is the more surprising, as *Plato* had given early proofs of a poetic genius; and even after he was in the vale of years, and had been long devoted to divine love and philosophy; yet, according to *Athenæus*, he was *then* not insensible to a passion of a more sensual kind; but exerted his poetic talents in the praises of the faded charms and wrinkles of *Archanaissa*, who had been formerly admired at *Athens*, and celebrated for her beauty*.

* Αρχανασσαν έχω την εκ Κολοφωνα εταιρη,
Ης και επι ρυτιδων ποιησας επεσιν ερωσ.

BUT *Athenæus* seems to have been rather too much prejudiced against *Plato*. Persons of his superior worth are the more apt to be envied and misrepresented. Whatever errors he had ought to be buried in oblivion, while his name and works will ever be revered and esteemed.

Α δειλοι νεολιται ἀπαντησαντες εκεινης
Πρωτοπορου, δι' ούσης η̄κετε πυρκαϊνης.

ATHEN. lib. xiii.

Still Archaniſſa triumphs in my arms,
Love from her wrinkles more ſecurely warms :
Leſs happy they ! who in her youthful bloom
Paſs'd through a flaming pile t' embrace their tomb.

C H A P. XIII.

*On the medical Uses, and Qualities, of the Wines
of the Ancients.*

THE ancient physicians divided the art of phyfic into three branches : The first regarded the regimen of a proper diet ; and * *Celsus* observes, that the most *eminent* among them, particularly cultivated and *improved* this *principal* part of it.

* Iisdem temporibus medicina in tres partes diducta fuit : ut una esset quæ victu, altera quæ medicamentis, tertia quæ manu mederetur : primam διαίτην, secundam φαρμακευτικήν, tertiam χειρουργικήν, Græci nominaverunt. Ejus autem quæ victu morbos curat, longe clarissimi auctores, et etiam altius quædam agitare conati, rerum quoque naturam sibi vindicaverunt ; tanquam sine ea, manca, et debilis medicina esset. Lib. i. cap. i.

GREECE, in which the first physicians flourished, was productive of the best Wines, of very different qualities, which were variously directed by them, for preserving, and restoring health. But as the efficacy of some Wines, in raising the motion of the blood, restoring strength, and reviving the animal spirits, is *equally*, if not more *immediately* powerful, than any other *alterative* medicine; it has always been regarded by them, not only as a principal part in their dietetic regimen, but as an active instrument, in the *pharmaceutic* cure of several diseases.

HIPPOCRATES says, that physic before his time was not regarded as an *art*, or deserved the *name* of it; and that he was the first among the *Greek* physicians, who reduced it to a regular system, and laid the *foundation* of all medical knowledge, by giving the best *dietic* rules for preserving health; which he deduced from their *evident*, not *occult* qualities, confirmed by observation and experience.

He pursued the same laborious method, in investigating the nature of the different Wines of his country,

country, and explaining their qualities. Neither is his industry less conspicuous, than his judgment and accuracy in directing the use of them, and adapting them to different constitutions, and seasons of the year. It is remarkable that he acquired the knowledge of these dietetic rules from his own observation, and says*, that those which had been given by any of his predecessors, were quite imperfect, and undeserving any notice. But he *claims the account he has given of the qualities of the Greek Wines, as his own, entirely unknown to any of his predecessors, and unattempted by them.*

THOUGH the names only now exist, of the Wines of the ancients, and no traces remain of those vineyards, from whence they were produced; yet the rules given by *Hippocrates* are the only true standard, by which the qualities of all Wines, both ancient and modern, can be known. † For it has been evidently shewn, that the *ardent spirit* in all

* Αταρ εδε περι διαιτης οι αρχαιοι ξυνεγραψαν, ουδεν αξιον λογου περι διαιτης οξεν. De Vi&ct. Acut.

† See Chap. I. of the Wines of the Ancients, page 2.

fermented.

fermented liquors, determines their *general character*, and difference from all other liquors ; and though the *quantity* of it is different in various Wines, yet when separated from them, and purely *rectified*, it is indiscriminately the *same*, from whatever vegetable juices it is obtained ; and the proportion of this *ardent spirit*, to the other *aqueous, saline, oily, and terrestrial* parts of the Wine ; their different *combinations and union*, constitute the great *variety* of vinous liquors. *Galen* blames *Hippocrates* for treating this subject in such a concise and imperfect manner : His active genius could not bear being confined within such strict, and narrow limits ; he attempted to explain the nature of the *Greek*, and all other Wines, from their prevailing *elementary qualities*, and by their power of correcting an *opposite temperament* in human bodies. With this false philosophy, he has polluted and perplexed his theory and practice ; and such was his influence, that it continued to prevail for many succeeding centuries : A remarkable instance, how much more easily the mind is inclined to *create*, and embrace a pleasing *hypothesis*, than by exact experiments and observation, to make more
slow

slow and certain advances in knowledge. However, he was an useful commentator on *Hippocrates*, and a judicious practitioner, when he did not deviate from his rules.

* HIPPOCRATES regards the *true knowledge of the dietic rules*, as being *principally necessary* to form a physician, and mentions *how various and extensive* that *knowledge must be*, before he can *direct or describe them*. Whoever reads with attention his *dietic precepts* for preserving health, will be equally surprised at his extensive knowledge and judgment, in adapting them to different constitutions, sexes, ages, and seasons of the year; in which no physician, acquainted with the modern discoveries, and the laws of the animal oeconomy, could be more exact. Nor was he insensible of their great value; and with a conscious dignity claims more merit from being the *inventor* of them, than from any other improvements he made in the art of physic. He likewise asserts, that they are as *perfect* in their

* Φημι δε δεῖν τὸν μελλοῦντα ὀρθῶς ἐνυγραφεῖν περὶ διαίτης ἀνθρώπου,
πρῶτον μὲν πάντος φύσιν ἀνθρώπου γινῶσκειν, καὶ διαγινῶσκειν. Περὶ διαίτ. Lib.
i. De Vict. Rat.

kind,

kind, as, from the *nature of things*, they can possibly be made; but that some deviations from a healthy state must be unavoidable, unless likewise the *exact quantity of food and exercise* was known, which neither exceeds, or falls short, of a certain measure; which, if acquired, would render their rules perfect, and preserve a *constant state of health*. Is not the *Static doctrine* of * *Sanctorius* expressed here, in the *strongest* and *plainest* terms? But at the same time that with this surprising sagacity, he perceived the usefulness of such a knowledge, he seems to lament that it † *was impossible ever to acquire it*.

HIPPOCRATES wrote in an elegant, but concise style, as he directed his precepts more particularly to his disciples, who were properly prepared, and capable of understanding them; he therefore omits several minute circumstances, which were then *well known*, or any unnecessary repetition, of what he

* Si tantum, et tale, humoribus et solidis restitatur quantum, et quale per actiones vitæ deperditur, vita sana tuetur. Sanct. Med. Stat. Aph. I.

† Εὐρετον ἐπὶ τοῖς πρὸς ἑκάστην φύσιν, σίτην, μέτρον, καὶ ποσὸν ἀριθμὸς, μὴ ἔχον ὑπερβολήν, μὴτε ἐπὶ τὸ πλεον, μὴτε ἐπὶ τὸ εὐλαστον, εὐροῖτο αὖ ὕμνη τοῖσι ἀνθρώποισιν ἀκριβῶς—τετο δὲ ἀδυνατον εὐρεῖν. De Vict. Rat. lib. i.

had

had before explained. From hence, several expressions, relating to the strength of the Wines, and his intention in directing them, must now appear obscure ; but from the history already given of the Wines of the Ancients, it will be more easy to remove these difficulties.

It is not my intention to write a particular comment on *Hippocrates*, when he directs these Wines, either in his dietetic, or medical regimen ; and shall dwell no longer on that subject, than is necessary to illustrate some obscure, or doubtful passages, and to make such general observations on the qualities of them, as may make us more capable of knowing his medical intention in directing them, and of substituting any of our modern Wines in similar circumstances.

It was usual with the ancients to dilute their Wines with water, according to their different strength ; hence they were divided into the *two* different classes of such which would *bear a large*, or but a *small* quantity of water. It is likewise evident that in all their regular entertainments, these strong Wines were never drank *pure*, but *mixed* with a certain proportion of water, to render

A a a

them

them more grateful or salutary ; from which, however, they *occasionally* varied. This custom, in which they all agree, prevailed in the time of *Hom*er, and was continued in successive ages, though several disputes have arisen about the different proportions of the water to the Wine in these vinous mixtures.

PLUTARCH has mentioned three principal mixtures, which had been *long established*, and continued to prevail in his time ; in which the quantity of water was at least *double* to that of the Wine, except in the *strongest*, which he calls *πεντε*, or *five*. This consisted of *three* parts of *water*, and *two* of *Wine*. Another mixture is mentioned by † *Athenæus*, celebrated by some poets for its superior strength, called *πεντε και δυο*, which consisted of *five* parts of *pure Wine*, and *two* of *water*, and seems rather to have been drank sometimes by a few, devoted to *Bacchus*, in opposition to the *sober πεντε* of *Plutarch*, than to have been frequently or *regularly* used in any entertainment among them. *Anacreon*, who parti-

† Vide Athen. lib. x. p. 327, 328.

cularly mentions it, acknowledges that it soon made them furious, like the *Bacchanals*.

HIPPOCRATES was the first who applied Wine to medical uses, and has directed * *three* different mixtures of the strong Wines, from the first common standard, to another of greater strength, and to a third, which was the extreme degree of strength, which he assigned to those vinous mixtures, which acquired this *increasing* strength, by gradually *lessening* the quantity of water, though he occasionally varied them. † In the same manner, but with a very different intention, he reduced the strength of the weak Wines from their original mild degree to strength, to their greatest weakness, which he occasionally exceeded with more freedom. He likewise distinguished the mixtures of the strong Wines by the name of *συνωδες*, and of the weak by *ὑδαρες*.

THOUGH it may appear now somewhat difficult to determine the exact proportion of Wine and water in these strong and weak mixtures, by these

* *Ακρατον, ακραιτερον, ακυαλιστατον.*

† *Υδαρες, υδαριτερον, υδαριστατον.*

terms, yet it is evident that a certain degree of strength was assigned to each of them; in which the former was gradually encreased, and in the latter diminished.

THE term *ακρατον* has been used often to express pure Wine. But *Hippocrates* evidently considers it here as a Wine of the strong kind, *reduced* to the common standard, whose strength is gradually encreased by lessening the quantity of water; and its extreme degree, the *ακρατεστων*, is not however pure Wine, but mixed with the least proportion of water. We find likewise the weak Wines diminished in their strength in a like gradual manner, by encreasing the quantity of water; the *extreme* degree, or *υδαρεστων*, being so weak, as if that mixture was rather intended to correct the inactivity of aqueous liquors, than to heat, or act *as Wine* in raising the motion or heat of the blood, though it still retained some vinous qualities.

HIPPOCRATES has no where mentioned the particular proportions of Wine and water, in his three general mixtures of strong and weak Wines; which were undoubtedly known to his disciples; yet any

physician acquainted with his style, could not mistake his intention in directing them; and whenever he deviates in some degree from them, he particularly uses some expression either to encrease or diminish their force. However, in general, he allows a latitude to the physician, and observes, that it is necessary he should know how to vary them occasionally; and *he* often uses them, not only in his dietetic regimen, but as a medicinal or pharmaceutic part, in acute diseases.

It is very remarkable that * *Hippocrates* assigns a place among his *Apborisms* to a particular mixture, where he mentions the exact proportion of the *Wine* and *water*, which he calls *ισος ισω*, and consists of *equal* parts of each. This, he *says*, will entirely remove the anxiety, oscillations, and cold rigors which precede, and attend the first paroxysm of a fever.

THIS state of the *disease* is justly considered by him as deserving a particular *attention* and *exactness* in the conduct of it; as he well knew, that the *salutary progress* of it depended on moderat-

* ΑΛΥΚΗΝ, ΧΑΣΜΗΝ, ΘΕΙΚΗΝ, ΟΙΝΟΣ ΙΣΟΣ ΙΣΩ ΠΙΝΟΜΕΝΟΣ ΛΥΕΙ. Lib. vii. Aph. 56.

ing the *force* and *duration* of these symptoms ; as the succeeding heat would, and indeed ought to rise, in proportion to them : Neither does he consider the fever as the *real disease*, but a natural *salutary effect* to disengage the vessels from these obstructions, and to throw off the oppressing load. In these circumstances, when all the *moving powers* were *depressed* and low, some *cordial animating medicine* was necessary, which would most *effectually* and *safely raise* and *enlarge* the motion of the blood ; but this ought to be of an *exact* and *proper* temper ; for by being too *weak*, it would *prevent*, or *retard* the *crisis* ; or by being too *strong*, *inflame* the blood, and instead of a favourable *intermission*, or *remission*, terminate in a *continual* or more dangerous *fever*.

THIS mixture was certainly different from any of the *three* former, or of any intermediate degree of strength, otherwise he would have referred it to them. But in this low and depressed motion of the blood, *Hippocrates* found it necessary to add a greater strength to the vinous mixture, than that which he had assigned to the ἀραιεσάτον. This ἀραιεσάτον most probably was the same with the old πεντε of *Plutarch*, which had been long used
before

before his time ; in which the proportion of water to the Wine was as three to two ; and even in *this case*, he seems to have increased the strength of it in the same gradual proportion with the former, and the quantity of the Wine was then only equal to that of the water.

THIS is a remarkable instance of the *moderate* degree of strength in these three principal mixtures, and of the sagacity and caution of *Hippocrates*, who from long experience had observed that this exact mixture was safely effectual, and *critically* adapted to this state of that disease. He however gives no direction in what manner or quantity it is to be taken, but in the word *πινομεν* ; nor was it indeed necessary ; for whenever the *αρχαῖς* is directed by him in his dietic rules of preserving health, it is always in *moderate* quantities. But in this case it must have been more so, and cautiously repeated, till the oppression and the cold sensation are removed ; and it is then always to be taken warm, except when the weakness is owing to preceding *heat*, and *profuse* sweats, when he particularly directs that it should be taken cold.

THOUGH

THOUGH these principal vinous mixtures have *stated* degrees of *strength* and determined *qualities*, yet he often extends them beyond their usual limits, but to answer different, and even opposite intentions; but that of the strong kind in a more confined and exact proportion, and of the weak mixtures more freely. Thus he has directed the $\iota\sigma\omicron\varsigma \iota\sigma\omega$ (equal parts of Wine and water) in a moderate, and gradual proportion, exceeding the common strongest mixture, as the most powerful *cordial*; but among the various *cooling* drinks which in another place he enumerates as most proper in *Fevers*, he mentions a *composition of one part of the old Thasian Wine, to twenty-five parts of water* †.

GREECE, and all warm climates, are productive of a greater variety of strong, than weak Wines; and probably some of them, which were ranged in that class, were so strong, as to require, in some cases, a greater dilution with water. The inhabitants likewise in these countries, are generally more temperate than in colder climates, and where they have more light Wines: however, ‡ *Galen*

† Τὸ το δε θασιον οινον παλαιον, πειτε και εικοσιν υδατος και ένα οινε διδω.
De Morb. lib. iii.

‡ Comment. in lib. iii. Hip. de Vict. in Morb. Ac.

says,

says, that in all the various places to which he had travelled, even in *Ægypt*, he found that the weak kind of Wines were produced from some vines in a particular situation and aspect to the sun.

To make these dietic rules more particularly useful, § *Hippocrates*, in another treatise, has directed in what manner they are to be *varied*, and *adapted* to different *seasons* of the year, *constitutions*, *sexes*, and *ages*. But this regimen is not designed for the *athletic* and healthy, or others, who cannot, from their uncertain situation, or other circumstances, observe them; but to valetudinarians, or those of a more precarious state of health; and though some deviations from them will be almost unavoidable, yet when they are light, they will be easily rectified.

HIPPOCRATES begins with the *winter* season; in which he directs, that the quantity of food should be *increased*, and that it should chiefly consist of the most solid animal kind, with bread, but few vegetables, and that the *quantity* of their vinous

§ *Περὶ διαίτης τῶν ἰδιωτῶν.* De Victu Salubri privatorum.

B b b

mixtures

mixtures should be *lessened*, and their *strength increased*; to which he assigns that degree, which he calls ἀρσάζεσθαι. By these means, while the air is more *moist* and *cold*, the body will be preserved in a more *dry*, and *firm* state of health. He then proceeds to the *spring* season, when the food is to be taken in a *less quantity*, but more *mild*, and *moist*, and the vinous mixtures in a *larger quantity*, but *reduced in strength* to what he calls ὑδαρσεσθαι. In the same manner as the *summer* advances, the quantity of food is to be *lessened*, and more *mild* and *moist*; but the quantity of the vinous mixture to be largely increased, and reduced to the weakness of what he calls ὑδαρσεσθαι. In the *autumn* the quantity of the food is to be *increased*, and its consistence more *solid*, and that of the vinous mixture to be *lessened*, but more *generous*, equal to what he calls ἀρσάτεσθαι. * He has directed in what manner these changes are to be gradually made, from the *winter* to the *spring*, and from that to the *summer*, and from this to the *autumnal* season. He particularly directs in what manner these *progressive*, not *sudden* changes,

* Καὶ οὕτως μὴ μεγάλη ἡ μεταβολὴ εἶναι, κατὰ μικρὸν μὴ ἐξαπὺς χρῆσθαι. De Salubr. Vict. Rat.

should

should be made, from one season to another, and has confirmed these rules in † two concise aphorisms.

IN the following part of this book he gives particular rules in what manner they are to be adapted to different constitutions, sexes, and ages, and any deviations from them corrected.

HIPPOCRATES seldom omits directing these vinous mixtures not only in his dietic rules of preserving, but restoring health. However, as their exact strength, and his medical intention in directing them, have been attended with some obscurity, I have omitted no opportunity of removing it. But in this regimen, adapted to the four seasons of the year, we find that the two variations of the vinous mixtures of the strong and weak Wines, from their fixed standard he assigned to them, are so particularly distinguished by him, that his intention of thus adapting them to these variations, appears very evident: I shall therefore add a few observations on them, as they seem to confirm those which have been already made, and may farther illustrate and *ascertain* their degree of

† Aph. 17, 18, lib. ii.

strength, and his intention, whenever he directs them on other occasions.

THE *αρεατον* was a vinous mixture reduced to a certain and generous degree of strength, which he had assigned to it, as the standard by which it was distinguished, and usually drank at their meals and entertainments. But sometimes they required a stronger or less diluted mixture, which was called *αρεατεσερον*, and though stronger than the former, yet was often taken freely by some, without being inebriated by it; but by an excess in quantity would soon end in ebriety. This was the utmost degree of strength in which they usually and regularly drank these Wines. The *αρεατεσατον* would sooner inebriate, and was chiefly directed in a medical regimen; and we may observe that in this dietetic regimen, adapted to various circumstances, whenever he appoints the *αρεατεσερον*, or *αρεατεσατον*, he always directs that the quantity should be in the same proportion diminished; but whenever he directs the strongest vinous mixture in diseases, especially of the acute kind, we may certainly conclude, that the whole quantity was much less than that which was taken in this dietetic healthy regimen, and

that

that the quantity taken at any *single* time was much less, and cautiously repeated at a greater distance.

THE *υδαρες*, or aqueous Wines, though they differed in strength, yet some of them were so mild, that they required no water to be added to them, and others but a small quantity, on which account, he distinguished them by the name of *ολιγοφοροι*; and *Hippocrates* regards the difference between some of them, when pure or lightly diluted, of so little consequence, that in the beginning of the summer season, in this dietic regimen, he directs this Wine, *υδαρες*, in its original strength, for their usual drink; and afterwards he directs it to be largely diluted in the advancing heat of it, but not so much with a view of reducing its strength, as of supplying their blood, disposed to a *viscid* inflammatory state, with a larger quantity of that diluting fluid.

THE light, annual Wines of *Greece*, were very cheap, and, diluted with water, were the common beverage of the inhabitants, and more effectually extinguished thirst than water alone. Neither did they usually drink any other *fermented* liquor but Wine,

Wine, on which account it became a material article in every kind of regimen. *Hippocrates* was perfectly acquainted with the qualities of all the Wines of his country, but in directing them regards *principally* their different degrees of strength, and next the other *evident* qualities they possessed, either from their *taste*, as being *rough*, *soft*, or *sweet*, or *fragrant* or *inodorous*, *old* or *recent*, or of a *middle* age ; he seems to give little regard to the *colour* of them, as several of the same colour possess very different qualities. Thus he describes three different Wines of the *black* colour ; the *auster* * of a *dry* or more firm taste, the *soft*, and the *sweet*. The former is often celebrated by *Homer* for its generous qualities. *Galen* justly observes, that these Wines were rather of a deep red, or yellow colour ; and this is most probable, as few countries are without red Wines, and the black are no where produced ; and it was very difficult to fine down the heavy strong *Greek* Wines, which made them impure, and the colour more obscure. *Horace* complains of this prevailing fault in most of the *Greek* Wines, which were imported to *Rome*, and in that state were disagreeable to the stomach,

* Τῶν δὲ οἴνων, οἱ μέλανες καὶ αὐστηροὶ ἐνθελεροὶ, οἱ δὲ μαλακοὶ μέλανες, οἱ δὲ γλυκεροὶ μέλανες — De Vict. Rat. lib. ii.

and

and particularly * describes this *process*, by which they were depurated, which was evidently derived from *Hippocrates* to the *Greeks*, and the *Romans*; but as it was well known in his time, he points out only the *three principal* parts of the operation, in three † expressive words. The *racking* it from the gross lees into another vessel, *exposing* it to the cold night air to purify it farther, and afterwards *straining* it from any remaining foulness. In two other words, he explains his intention by this operation of exhaling its noxious volatile qualities, and making it more mild and salutary. I dwell more on this passage, as it is a remarkable instance of the concise style of *Hippocrates*, and of the obscurity which must unavoidably appear in several passages relating to his Wines, to any one who is not acquainted with the manner of preparing them. Before this Wine is depurated, it is called by him οὐ ἐνθερίασμενος, from its *fery* qualities; but the sense of it is mistaken by the commentators.

* Massica si cœlo supponas vina sereno,
Nocturnâ, si quid crassi est, tenuabitur aurâ,
Et decedet odor nervis inimicus, at illa.
Integrum perdunt lino vitiata saporem.

HOR. Lib. ii. Sat. 4.

† Ο οἶνος διαθερμὸς καὶ ἀποψυχόμενος καὶ ἀμβουόμενος, ἀπλοτέρος γὰρ
De Affect.

He seldom mentions the name of any particular Wines, but chiefly regards the qualities which it possesses in common with other Wines of the same kind. † Thus in one stage of a purulent case of the kidneys, he directs the sweet *Mendæan* Wine, with a view of promoting a discharge of the matter, and then adds, *or any other sweet white Wine, largely diluted*; but, in the next chapter, when the purulent matter had been discharged, and no feverish symptoms remained, he directs the strong austere *Mendæan* Wine, with an intention of strengthening *them*. From whence we may conclude, that any other Wine of the same qualities, ancient or modern, would equally have answered his intention.

His successors, particularly *Galen* and *Dioscorides*, have given tedious and perplexing catalogues of different Wines, with their fictitious qualities deduced from erroneous principles; while he always endeavours to be concise and clear, and to fix the attention on what was really useful and necessary to be known.

HIPPOCRATES, from observation and experience, was well acquainted with the various qualities of all

† Καὶ οἶνον πινέτω λευκὸν μενδαίου μελιχροῦ, ἢ ἄλλου λευκοῦ τοῦ πλείονος κεκρημένου. De Intern. Affect.

kinds of aliments of the animal and vegetable kind, and all kinds of liquids, Wine, water, vinegar, oil, milk, honey, and their different combinations * All these he has particularly described, and thinks the knowledge of them necessary to a physician ; but yet we find, that he never depends on any of their particular qualities, or virtues, to preserve an equal state of health. His superior skill and judgment consisted in adapting them to different constitutions, and variations of the seasons ; as any deviations from these dietic rules must be attended with some alterations from a perfect healthy state ; and though it is scarce possible to observe them with a rigid exactness, yet such deviations as are of a lighter kind, will be easily rectified. But there is no precept which he more frequently repeats and inculcates, than not to make any rash change in that habitual regimen of diet, to which nature has been long accustomed and *delighted* in ; and when from any disease a different regimen is necessary, it ought to be as *similar* to the former, as is consistent with the nature of it.

* De Viët. Rat. Sanor. lib. ii.

How different are these rules of *Hippocrates* for preserving health, from *those* given by many others, which consist of a *few principal* maxims, and *partial* virtues ascribed to some particular articles in diet, and equally condemning others? While not only *sudden* changes are made, but a regimen of diet is directed to be pursued, quite opposite to the former; which must be always dangerous, and often fatally disappoint their vain expectations; whereas such even who have recovered from a tedious, and dangerous disease, will never attain to their pristine state of health, until they gradually return to *that regimen*, in which they formerly enjoyed it.

THOUGH *Hippocrates* has * particularly described the progress and symptoms of several diseases, and many of the acute kind, with the diet, evacuations, and medicines, which he directed; yet in a singular and very elegant † Treatise, he has *added*

* De Morbis; De Affectionibus; De Intern. Affectib.

† Χρη δε, και τα μαθηματα ποιεσθαι εν τη διαση των ανθρωπων επι υγια-
νουτων, οια ευμερει· ει γαρ δη τοις γε υγιανουσι φαινεται διαφεροντα μεγαλα
τα τοια η τοια διαιτηματα, εν αλλω τιμ πε και εν τησι μεταβολησι, πως ουχι
και εν γε τησι νοσησι διαφerei μεγαλα, και ταυτων εν τησιν οξυτατησι μαλιστα.
De Vict. Acut.

to the dietic rules he had given before, the *medical rules* of diet in acute diseases, which, though in many respects *different* from them, yet he justly observes, that the knowledge of the former *must be first acquired, and that there is a necessary connexion between them*; for whoever is unacquainted with the rules of preserving health, certainly cannot be capable of directing such as will be most proper to restore it. These likewise require more judgment to adapt them to the different stages of the disease, and the *more frequent variations of the symptoms*, and are confined within more strict limits, as *any deviations from the former* can only in a certain degree be *injurious*, and may be more easily rectified, but *any errors* in those of the *acute kind* will not only render them more *dangerous*, but often *fatal*.

THE *Materia Medica* was very much confined in the time of *Hippocrates*. He was unacquainted with the mild *eccoprotics*, and the neutral salts, which are of such extensive use in the beginning of acute diseases; and chiefly substituted clysters instead of them, as lenient aperient fomentations to

the bowels, not as purgatives ; for these were of a very rough and active kind. On that account he applies the terms *φαρμακευειν φαρμακην*, to distinguish these evacuations from *any* other, and therefore frequently repeats his cautions against the use of them, especially in the beginning of acute diseases, until the violence of the symptoms was abated ; except in some particular circumstances, and chiefly when the bowels were *oppressed*, or irritated with bilious, or other noxious humours, which entirely interrupted the natural and regular course of the disease to any favourable crisis, and must prove fatal, unless they were soon discharged. In such circumstances active evacuating medicines, not only by purging, but sometimes vomiting, but without the roughness and acrimony of the former, can only give effectual relief. *Hippocrates* was sensible of this prevailing fault in the hellebore, which he seems to prefer to any other of that class, and generally endeavours to *correct* it with some milder ingredients. However it is evident that these precepts have no reference to the evacuations, which are procured by clysters, as he often directs the repeated use of them, when he forbids that of any purgatives.

WE find therefore that *Hippocrates* made use of but few medicines of the pharmaceutic kind; and his *medical dietic regimen*, *evacuations*, and his *vinous medicines*, were the *principal aids* on which he chiefly depended in the cure of diseases.

HOWEVER this was a large field; and the knowledge which from long observation he had acquired of their qualities, and their effects on the human body, may be justly esteemed as very extensive. These were the instruments which he applied with equal sagacity to the symptoms and cure of diseases, as he had directed his dietic rules for the preservation of health. It is likewise very evident that he occasionally directed pharmaceutic medicines, and that he was well acquainted with their qualities, and the extent of them; some of which we find were very considerable. But though we have only a very imperfect knowledge of them, the loss is less to be lamented by those who may certainly know his medical intention in directing them.

HIPPOCRATES prefers his *πίσσαν*, or *ptissan*, to any other *aliment* in acute diseases. This was a
decoction

decoction of barley in water, which, when directed *entire*, he calls *ολη ωλισσάνη*; but when separated from the barley, and boiled again, after it had remained for a sufficient time in a cold situation, the *lighter*, *lactescent*, and more *oleaginous* parts of it rose on the surface; which when separated, and collected, he calls *γλισχρασμα*, or *cremor bordei*, the *cream* of barley. He is particularly exact in describing the preparation of them, and dwells much on the *singular nutritious*, and *medical* qualities which he assigns to them. They differ only in their degree of strength. He gives a * particular description of the latter, *that it was light, of a smooth, moist, and equal consistence, gratefully sweet, allaying thirst, not flatulent, expelling the feces, when too hard and inactive, but neither purgative, or astringent*. He generally begins with giving the cream of barley, and gradually proceeds to the use of the more solid, *ptissan*, unstrained. He distinguishes these alimentary preparations by the general name of *ροφημαλα*, *forbitiones*; and is mi-

* Το γλε γλισχρασμα αυτεος λειον, και ευνεχες, και προσητες ειν και ολισθηρον, και πλαδαρον μειριως, και αδιψον, και ευεκπλυτον, ει τι και τετεου προσδιοι και ετε ευψιν εχου, ετε αραιον κακον. De Viſt. Acut.

mutely exact in mentioning the quantity which is to be taken, and at what distance to be repeated ; and in adapting them to the strength of the patient, and the different stages of the disease ; and particularly to distinguish whether the *weakness* is owing to the necessary evacuations, which have preceded, or a real want of sufficient nourishment ; for in the former case, a stronger, or a greater supply of aliment, unless very gradually made, would rather *oppress* and *increase* the weakness. He illustrates these rules by several instances.

AMONG others, he observes, that in an acute *pleurisy*, where neither bleeding or fomentations have given relief, and unattended with any expectoration, if you give the *whole ptissan*, it will prove quickly *fatal* ; and in the subsequent precept he says, if from the beginning, in a similar acute pleurisy, you give the *whole ptissan* for nourishment, it will be equally, though more slowly fatal, and generally about the seventh day, when, on opening the body, the *pleura* was found mortified. From hence it is very evident, that *Hippocrates*, in these acute local inflammations of the breast,

breast, entirely depended on large and repeated bleeding, *emollient clysters*, cooling diluents, and the *lightest aliment*, both in *quantity* and *quality*, until the symptoms subsided either by these means, or by a favourable expectoration.

WATER was the *basis* of all his cooling drinks, to which he added a moderate proportion of the weak white *Wines*, to make it more effectually *diluting*, and capable of *pervading* the *distant* and more *minute* obstructed vessels ; and it was often impregnated with other ingredients, to answer different medical intentions ; of which mixtures he has * given several elegant forms ; but for these purposes he added chiefly honey or vinegar ; the former, when mixed with water, he calls *μελιχρολον*, and the other *οξυχρολον*, which he separately directed, when a lenient or more active attenuating mixture was necessary, especially to promote expectoration ; but in that case he more frequently directed his favourite *οξυμελ*, in which their united virtues were combined.

* Lib. i. Text. 32 et 33.

† De Morb. lib. iii. cap. 12.

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ine, fragrant qualities, which were very different from those of the Wines we are now acquainted with. Neither is there any doubt, if *Hippocrates* had been acquainted with the generous qualities of the alterative medicines of this class, and their compositions, with which the present *Materia Medica* abounds, but that he would have frequently preferred them to these vinous mixtures.

IN the third book he gives a general description of the general qualities and strength of the *Greek Wines*, which he directed in acute diseases, and of the *peculiar medical* qualities, which he likewise ascribes to some of them, and in what particular stages and circumstances of the diseases they are to be directed, in such a manner * as to render them *salutary*, and *prevent* them from being *hurtful*; and claims the singular merit of being the first who applied them to medical uses.

THE *peculiar* qualities of these Wines consisted in being mildly purgative or diuretic, or in *pro-*

* Καλὰ δὲ ταῦτα τεκμηρία ἐστὶ τῆς περὶ οἴνου ὠφελείης καὶ βλαβῆς, ὅσοτα ἀκαταμάχθητα ἐν τοῖσιν ἐμὲν γράλληροισι. Lib. De Vict. Acut.

noting the regular, or restraining the irregular excretions and discharges in these diseases. These he deduced from observations on their more evident qualities, as being either of an *austere, soft, mild, or sweet* taste, or of a fragrant smell, or inodorous. But whenever he directs them to answer any particular intention, he first distinguishes them as being of the *strong* or *weak* kind, and always regards in these cases the degree of *strength*, as being the most powerful agent, and *superiour* to any *peculiar* quality. * Thus when he describes the Wines most proper to promote *expectoration*, when the *breast* is affected, he observes, *that if they produce heat and thirst, they will rather retard than promote expectoration*, by rendering it more *dry* and *viscid*; and that any of the lighter white Wines, which possess one of these *peculiar* qualities, will more effectually promote it.

IN the same manner he † absolutely forbids the use of any of the stronger mixtures, whenever in

* Και οἱσι μεν διψῶδες ἐστὶ πινόμενος, ἥσσον αὐ τοῖσι συναναχοί, ἢ ὁ ἑτερος οἶνος· οἱσι δὲ μὴ διψῶδες, μᾶλλον αναχοί αὐ τῷ ἑτέρῳ. De Vict. Acut.

† Τραπέυσαντι μὲν τοι ἐν ταύτῃσι τῇσι νοσήσῃσι ἢ καθαράν ἰχθυήν, ἢ φρενῶν ἄψιν, πάντα πασιν οἷνι ἀποχετίων· ὕδατι δὲ ἐν τῷ τοιαύτῳ χρῆσθαι, ἢ

the progress of the fever the head is affected with a great *heaviness*, or any alienation of the mind ; but directs that the drink should be entirely aqueous, or consist of the weakest inodorous white Wine drink, only taking a small quantity of water after it. From whence it is very evident, that he makes very little difference between the strength of these aqueous Wines very weakly diluted, and of water alone.

He very seldom directs water alone, but considers it as being the universal diluent, and the basis of other compounded liquids, whose efficacy greatly depends on its purity ; but * ascribes no other *medical* quality to it in acute diseases ; for neither in a pleurisy, or peripneumony, will it assuage the cough, or promote expectoration, but rather retard it, if it is constantly taken alone, un-

υδαρεα και λευκον παντελως δοτεον οινου και αοσμινου πανταπασι, και μετα την ποσιν αυτου, υδαρ μεταποσειν ολιγου. Lib. De Vict. Acut.

* Τδατι δε ποτω εν τησιν οξεισιν νεσοισιν αλλα μεν ουδεν εχω εργον ο, τε προσθω̃ν τε γαρ βηχος παρεγορικον εστιν εν τοις περιπνευμονικοις, τε πνευλε αναγωγον, αλλ̃ ησπον των αλλων, ει τις δια παυλος υδατι πολω χρεοιλο̃ μεσσην̃ μεν τοι οχυμειλτος και μελικρητη υδαρ επιρροφεομενου ολιγον, πνευλε αναγωγου εστι, δια την μεταβολην της ποιητης — αλλως δε τε διψαν πινει. Ibid.

less mixed with honey and vinegar, which communicates that particular quality to it. Neither will it extinguish thirst, and he adds, but *increase* it. *Hippocrates* refers this effect of water taken alone to fevers of the putrid kind; it has no *anti-septic* quality, but rather promotes *putrefaction*.

Hippocrates seems designedly to have omitted enumerating among the former Wines, a particular *Greek Wine*, to which he * ascribes some singular qualities, as being of a *white colour*, *light*, *weak*, and *inodorous*, whose *strength*, he says, was often *unequal*. But this regards its *comparative* strength, with that of *melicrate*, or water and honey; † for immediately he proceeds to observe, that as some of the *Wines* of this class were *stronger* than others, so some species of *honey* were much *stronger* than others. He therefore gives this caution, as he generally considered weak Wines, and *melicrate*, as being nearly similar in their strength. This is the true sense of this

* Αταρ και οινω λευκω, και λεπτω, και ολιγοφορω και ασωμω, η μεν ισχυροτερον η δε ασθενεστερον. Lib. De Vict. Acut.

† Μεγα γαρ μεν διαφερει οινω, και μελλος ανητοις εις ισχυω αμφοιν. Ibid. passage,

passage, which has perplexed all the commentators.

HIPPOCRATES, and after him *Galen*, chiefly used this kind of weak Wine in fevers, as it was chiefly aqueous, with a very small proportion of spirit. He always dwells much on the different purity of waters, and the salutary, or pernicious effects of those, which he calls *concocted* or *crude*, and gives particular directions about depurating the latter, by previously boiling it.

I HAVE been long inclined to think, that there is a *peculiar* quality in *that kind of water*, which constitutes the *greatest part* even of the strongest Wines, but prevails almost *entirely* in the weakest kind, which are animated only with a very small proportion of a vinous spirit; and therefore from the *nature* of it, must certainly possess *some* qualities, very different from those of the *common water*, which is in that soil, where the vine is *planted*; and which in that state is first received into the *small absorbent* vessels of its extended fibres; from

small

whence it is collected, and more digested in the *bulbous* parts of its root, and thence distributed through the *trunk*, into its *various ramifications*; where it must have been almost, if not *entirely separated* from all the heterogeneous, and *terrene* parts, which it contained, before it constitutes the *aqueous* parts of the *grape*; as it is very evident from * *static* experiments, that the whole size and weight of the greatest *tree*, is owing to *water alone*. It is likewise remarkable, that the fibres and vessels of the *Vine* are more *dry* and *rigid*, than of any other tree, and that it chiefly delights in a *sandy* soil. This *water*, therefore, *originally* of the best kind, and passing through the *finest Strainers*, must approach nearer to the *unmixed elementary* qualities of water, than has yet been found in any place, even when depurated with the greatest art. This seems to be confirmed, from the *specific gravity* of common water, being found greater than that of any pure, vinous liquor; and though this has been generally imputed to the prevailing

* Hale's, Vegetable Statics, Chap. V. and VII.

lighter

lighter qualities of its *spirituous* parts, yet it seems to be more owing to those of the *water*.

As this is the *universal diluent*, the best physicians, from *Hippocrates* to this time, agree, that the health of the inhabitants in all countries, very much depends on the purity of the Waters, and that many obstinate diseases owe their origin to their impurities. Neither have they been less solicitous, in endeavouring to depurate them by various means, and render them more pure and *salutary*. * It appears from experiments which have been made on water, collected from the purest snow, dissolved on the highest mountains, and the best common water, that the former possessed several peculiar, and very different qualities, and must from thence be more salutary.

I REMEMBER a remarkable instance in a nobleman of an eminent and distinguished character, who always lived temperately, but whose constitution was delicate and relaxed. About the age of seventy he became leucophlegmatic, his legs began

* Boerh. Elem. Chym. tom. ii. p. 164.

to swell, and his appetite and digestion to be depraved. I recommended to him to live chiefly on a light, *animal, solid food*, seasoned lightly, and of that kind which was most grateful to his stomach, with bread, and to take *only* for his *drink* a pint of the best *French* claret every day. He was never *thirsty* during this course, and was soon restored to a more firm state of health, and lived to near the age of eighty; when he gradually declined in his strength, but without any disease, but weakness. I impute entirely to his dietetic regimen his being thus preserved, as he seldom took any medicines, except pills of *ammoniacum, assa fœtida*, with *rhubarb* occasionally, to keep his bowels free. Perhaps the fine *elementary* and *animating* fluid contributed to make this regimen more effectual; to which *Boerhaave*, and others, have assigned such peculiar virtues, if it could be obtained in the greatest degree of purity.

THESE were the medical rules of diet, and these his materials, with a few pharmaceutic medicines; and proper evacuations, which *Hippocrates* used in the cure of diseases, and which he adapted to

the symptoms that occurred, either in their regular or irregular progress, especially those of the epidemic kind; with the same judgment as he had before directed his dietic rules to the different seasons of the year, and to different ages and constitutions. The *diagnostic* knowledge, and the natural *history* of these symptoms, he acquired by long observation, and has described them with equal accuracy and fidelity. Neither has he deduced his rules of practice from any *occult causes*, but from *facts*, and *real appearances*, which must therefore ever remain just and true in similar circumstances.

Of the seven books of *Epidemic Fevers*, the *first* and *third* are allowed by the best judges to be most genuine, and in every respect a *perfect* work. He there describes the annual constitution of the air, and the various changes which preceded these diseases, the progressive course of the symptoms through their different stages, and their termination. But as no certain rules of practice could be deduced from a general description of those diseases, which then prevailed, he added several particular

particular cases, to illustrate that general description of them. He does not perplex these *histories* with any reasoning on the *causes* of the symptoms, or the *effects* of the medicines which he occasionally used, except in some extraordinary circumstances, which required a deviation from the rules which he had before established. However there can be no doubt, but that he regularly directed some *pharmaceutic* medicines; and this is not obscurely hinted in several instances, but evidently appears in a * very acute irregular case, where he says, that *all medicines had proved ineffectual*. Neither indeed was it necessary to mention any such medicine, as he describes with such accuracy the order and procedure of the symptoms †, as evidently point out to a real physician, who is acquainted with *Hippocrates's* rules of practice, the same indications as if he was *present*, and sitting by the side of the sick person.

* Epid. lib. iii. sect. 2. Histor. 5.

† Certe ægrotantium historiæ,—has summa arte designavit Hippocrates; et iis tantum, in quibus totius rei cardo vertebatur, immoratus, morbi formam et lineamenta in ægroto quolibet iis coloribus expressit, ut quanquam ipse de curandi via conticescat, qualis demum ea debeat esse via, intelligenti haud difficulter appareat. FREIND Epist. ad D. Frewin.

It is not therefore surprizing, that from the most early, to the latest times, *Hippocrates* has been allowed by * the best judges to be supereminent in his character ; and the succeeding physicians, who have most closely pursued his rules, from *Aretæus*, to *Celsus* the *Roman*, and *Sydenham*, the *English Hippocrates*, have been most esteemed and distinguished.

DOCTOR *Sydenham*, who was justly eminent in his character, has described with great fidelity, the annual epidemics which prevailed in his time. His philosophic reasoning, like that of *Hippocrates*, is contained within a very small compass, and is rather obscure ; neither will it much *perplex*, or *inform* the mind. He considered every annual epidemic, as a *singular essence*, or fever, and laments

* Meruit hanc laudem et meruit fere solus, quod non visa nulli effinxerit, quod videnda nunquam neglexerit, quod opera naturæ narraverit, non autem detorserit vel mutaverit, quo labili aliter hypotesi honos permaneret et perennitas. BOERHAVII Oratio de Commend. Stud. Hippocr.

Itaque intelligentium omnium judicio inter scriptores medicos eundem, quem poetas inter Homerus, et Virgilius, aut inter oratores Cicero et Demosthenes locum obtinet. FREINDII Epist. ad D. Frewin.

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the necessity of a repeated labour, to investigate the nature of it, and method of cure, and says, that the same method of cure which succeeded in one year, not only proved ineffectual, but, perhaps, *fatal*, in the next. This, however, seems to be an early prejudice; some *latitude* must be allowed to his manner of expressing it; and in his more advanced years, he seems to have changed his opinion. Dr. *Freind* observes, that all of them, except the *petechial*, were of the same general kind. The same judicious physician likewise observes, that there is very little difference between the epidemic fevers, which *Hippocrates* describes in his first and third book of epidemics, which prevailed at *Thasos*, and those described by *Sydenham*, at *London* †; and that whoever compares the twelve histories in the beginning of the *third* book of *Hippocrates*, with the *fourteen* in the *first*, though the variations in the seasons were in many respects different, will find that they were equally of the same general *type*, and differed chiefly in

† Utcunque, five loci positione five constitutione aeris, ab Anglia longissime discrepet Thasos, inter febres et ab illo et ab Hippocrate adumbratas minimum intersit discriminis. FREIND, Comment. in Hippoc. Epid.

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the *irregularity* or *violence* of the symptoms*. Neither is the *concurrence* or *diversity* of symptoms, in any two of these histories, uniformly alike, from the difference of constitutions, and other unavoidable disturbing causes.

It seems therefore evident, that the general *constitution* of the air, and the *variations* in it, in the seasons of the year, chiefly produce the *epidemics*, which prevail in *all countries*. But when these changes greatly exceed their usual *limits* and *duration*, when they are *sudden*, and from one extreme to another; these fevers will assume different appearances, and often prevail not only the next, but for some succeeding years, then gradually *decline*, and at length the *stationary* epidemic will resume its usual form and progress.

EVERY one who has been long conversant in practice, must have made some observations of this

† Nam qui duodecim ægrotantium historias in principio tertii expositas ratione animoque lustrarit, facile perspiciet eos eodem plane morbo, ac illos qui in primo memorati sunt, laborasse; adeoque ad cæli constitutionem eam quæ illic describitur referri oportere. Ibid.

kind. I shall mention *two* instances of the return of two very remarkable epidemic fevers, where the same causes produced similar effects in the preceding, and succeeding annual epidemics. The first is from the account which Dr. Sydenham gives, of the gradual decline of the *intermitting stationary* fever, which began in 1667, and the succeeding changes in the air, till this fever began to appear in *London*, in *February*, 1685, after the *thaw* of the *frost*, which immediately preceded it in the end of the year 1684; which he observes, was entirely unlike the fevers of the eight preceding years; and though he was then infirm, and advanced in years, he thought it incumbent on him to publish an * account of this fever, as it required a very different method of cure, from what he had *established* in the preceding years. The frost, he observes, in 1683, was more violent, and lasted longer, than any which the oldest person could then remember to have seen; and that the *river Thames* was so much frozen, as to be able to bear the load of carts, with several kinds of merchandize, and great crowds of people. And though this fever had

* *Schedula monitoria seu de Novæ Febris Ingressu.*

not till then been epidemic in *London*, yet it had spread in several places in *England*, immediately after the *great frost* in 1683: a remarkable instance of the influence which the *sensible changes* of the air have in producing epidemics; as the atmosphere in *London* was certainly more warm than in many other parts of the country.

IN *February*, 1740, when the thaw began, after the preceding great frost in *December*, which continued to that time, an acute inflammatory fever became very epidemic in *Dublin*, which in its nature, progress, and the alterations made in the preceding and succeeding epidemics, greatly resembled in every respect that which had been described by Dr. *Sydenham*.

THERE were some peculiar circumstances attending this great frost. It began about the twentieth of *December* with a severe cold, and violent north-wind; whereas in the common frosts, the state of the air is generally calm. Neither did its changes to different points of the compass make any alteration in its equal progress; nor was it confined to

Great

Great Britain and *Ireland*, but prevailed more than usual in many parts of *Europe*. It was particularly fatal to the strong and healthy, especially to such who lived freely; unless its progress was prevented by free repeated bleeding, and a cool opening regimen. It declined in the summer, but the succeeding fever was more inflammatory than usual; and the change made in the air by this great frost was so permanent, that though I was engaged in large business, and had particular opportunity of observing the prevailing epidemic diseases, by attending the soldiers in the *Royal Infirmary*, who, from their manner of living, and being exposed to the vicissitudes of the air, are most liable to them, yet for *eight succeeding years*, I never met with any instance of a true *regular intermittent* fever; and I remember, some years after, on visiting the apothecaries and druggists shops, we found in one of the latter a large quantity of decayed bark, which was ordered to be destroyed; and the excuse he made for the badness of the bark was, that for many years past very little demand had been made for that medicine.

ABOUT eight years after this first period, the intermittent stationary fever began to return ; though at first in the various irregular forms of a quotidian, semiteridian, and often a quartan ; but by degrees it assumed its usual form and progress.

DOCTOR *Bryan Robinson*, with whom I was frequently engaged in attending persons during this time, informed me, that during this frost the mercury had often risen *higher* than ever he had observed it before in his thermometer. This is a singular circumstance, as during a long course of observations, continued by him for many years, it has not been known, at least for any continued space of time, to rise higher than thirty inches and a half, or to fall lower than twenty-seven and a half, but fluctuated between these two extremes. This variation in the weight and spring of the air on the vessels in human bodies, is very considerable, and must very sensibly affect them ; as the difference between each extreme is equal to $\frac{1}{10}$ of the whole weight ; and whenever it *continues* in either *extreme* for any *considerable time*, or *exceeds* its *fixed limits*, must probably be *alone* a sufficient cause.

cause to produce a great change in epidemic fevers; and to make them more dangerous, either by being too much inclined to the inflammatory, or putrid low kind.

BUT there is a great difference between the epidemic diseases, which arise from the constitution of the air, which precedes and attends them, and those which are owing to more *obscure* and *latent* causes, which *viliate* the air, and give a putrid disposition to the humours of those who *inspire* it. Though *Hippocrates* considers the sensible variations of the air as the general cause of epidemic fevers, yet he was not unacquainted with its being capable, as a *vehicle*, of conveying infection, and thereby producing *endemic* and epidemic fevers, either from * putrid *exhalations* in low marshy ground, or diseased bodies, where the air is not *ventilated*; or its being conveyed from thence by winds, to more distant places, and becoming epidemic; and he strongly points out these causes †, by a *singular* expression, ο αναπνεο-

* Vid. Lib. De Aere, Aquis et Locis.

† Εστὶ δὲ τούτο ο ἀναπνεόμενον. Φαίνεται γὰρ ὅτι τὰ διαστήματα ἑκάστου ἡμεῶν, καὶ αἰτίας ἑστί, ὅτι ἀπλῆται πάντων ἡ φύσις ἔστι, καὶ τῶν νοσησάντων καὶ τῶν πρὸς αὐτοῖς, καὶ γυναικῶν, καὶ ἀνδρῶν ὁμοίως. De Natura Homin.

μενον; that which is received by inspiration, and distinguishes it from the common and more sensible causes, as it equally affects all persons, of different constitutions, sexes, and ages, and manner of living.

THIS septic quality in the air was certainly well known to *Hippocrates*. *Galen* enlarged his observations on it; *Boerhaave* has explained the effects of it by several useful experiments; but Sir *John Pringle* has the sole merit of establishing this septic principle, and investigating the various causes which either separately, or combined, produce various fevers of this kind more or less fatal; and with the same accuracy and fidelity has given the best rules for preventing and curing them.

THOUGH *Hippocrates* was unacquainted with the true structure of the human body, yet he compiled the best system of it, which in that imperfect state of anatomy he could then acquire; and as every active and intelligent mind will naturally endeavour to explore the use of the parts which compose a fabric, capable of such various movements, he formed a kind of theory, in which he sometimes

times shews a surprising sagacity ; but no * *hypothesis*, from which he deduces his rules of practice in curing diseases : These were *fixed* on *evident* and unerring *principles*.

SOME of his successors, and these but few, followed his steps, but not with equal ardour. Neither was it so necessary to be exerted, as he had cleared the way, and made their progress more easy ; and though several useful rules and practical observations may be found among them, yet in the *general*, I think, a physician's mind, especially in the early part of his life, may be more *perplexed* than *informed*, by reading the voluminous *works* of the *ancients* ; and that his vacant hours, at any time, may be more usefully employed in other studies, or in giving a *repeated* attention to the rules and observations of *Hippocrates*.

HE was very sensible of the use of *anatomy*, and of an exact † *mathematical* reasoning ; to explain the action and use of this exquisite mechanism, especially that of the bones. Had he been ac-

* See page 395.

† Vid. Ep. ad Theſſalum filium.

quainted with the circulation of the blood, and the laws of the animal oeconomy, he would have greatly *enlarged* the *art* of phyfic, and *restrained* *them* within their proper *limits*.

THESE advantages, which the last age possessed, and the present more fully enjoys, have been extended by some to noble uses; while others have deduced the rules of curing diseases from a *specious hypothesis*, and mathematical demonstrations from assumed propositions. Neither can this kind of reasoning be applied with any degree of certainty to the symptoms of diseases; the causes of which are often either *doubtful* or *latent*; and the *action* of the *mind* is likewise a frequent *immechanical* *disturbing* cause.

THE *Materia Medica* was very much confined in the time of *Hippocrates*. This very useful part of medical knowledge has been greatly extended.

* We are not now deficient, but rather perplexed

* Neque ingens illa remediorum silva ita disposita et distincta est, ut non quoque medicum implicitum teneat, ipsaque in medendo officiat suppellectilis medicæ copia—cum tamen longe aliud sit in materia medica exercitatum esse, aliud mederi. FREIND. Epist. ad D. Frewin.

with

with the variety of its preparations, and the extraordinary virtues assigned to them. But it is certain, that *no medicine*, however great its powers may be, can be *useful*, but when it is judiciously *directed*, and must otherwise prove equally *prejudicial*.

Thus *Hippocrates* has fixed the medical art on its true and firm *basis*; and by his indefatigable industry, and a long course of observations, advanced it to a great degree of perfection, by giving the best general rules for preserving health, and curing diseases. Since that time, especially in the last, and present age, it has been largely improved, by the knowledge we have acquired of the mechanic structure of the human body, the laws of the animal oeconomy, and of the qualities of various medicines; by which means we are capable of investigating the true *causes* of many *effects*, and of deducing from them more evident rules of practice. But this art can only be usefully extended by the same continued observations on the rise and progress of the diseases in different countries, and how far the particular constitution

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of the air, and sensible variations of it, with the different local situation of them, and other remote causes, may alter the course of the general prevailing epidemic, and produce *endemic* diseases.

THIS can be only promoted by a faithful register of these circumstances, in different parts of the kingdom : the use of such registers was early perceived. *Henry* the eighth, by the advice of his privy council, ordered, in 1538, that the incumbent of every parish should keep an exact register of all *christenings*, *weddings*, and *funerals*, within his district ; but as these were very imperfectly collected, and several of them lost, queen *Elizabeth*, in 1558, gave a more particular order for their being made with more exactness, and preserved with more care. But no place in *England* slighted these rules more than the city of *London* ; neither can registers in larger cities be as useful as those in countries ; from the number of foreigners, and of others, differing from the established church, where the births, weddings, or burials of several are not regarded. To acquire a true knowledge of the various effects of different soils, situations,

tions, &c. country registers can only be depended upon; for the air is purer, and more free from mixture; the diet of the inhabitants more simple and plain, who are likewise more regular in every other respect than those of towns and cities. But of country registers those are the surest, where the whole parish is only one village, its inhabitants all having the same air, situation, and way of life; But larger parishes, consisting of several distinct villages and hamlets, lying in various situations, soils, &c. are not so uniform.

IN *England*, the changes in the air are very frequent; on which account the health of the inhabitants is more easily affected, and in no other country, perhaps, are there more complaining valetudinarians. However the *sensible* variations of the air, seldom greatly exceed their usual limits and duration, in producing any very extraordinary changes in the state of any epidemic; and we find from the registers of the prevailing diseases, in several parts of this kingdom, that their different appearances, are more owing to their different *situation* and *soil*, and other more *remote* causes, than to the *sensible* variations of the air.

THIS is confirmed by registers, which have been taken from the time of queen *Elizabeth*, which Dr. *Short* has with a laborious industry collected from a hundred and sixty parishes, continued, in a successive order, for almost two hundred years to his time; in which he has described particularly their different situations, soils, waters, with the number of births, marriages, and deaths, in each parish; with observations on their being more or less healthy, and the different progress of epidemic and endemial diseases more peculiar to them; and which are confirmed by *tables*, to which he refers, in their different periods of time; which though perplexing, from the various numerical computations, yet undoubtedly deserve a more particular attention than seems to me to have been given to the author. They were published in 1750; and as they confirm the observations made by *Hippocrates*, and others, quoted in this short imperfect essay; I shall extract a few of them, sufficient to shew how far future observations of this kind, are necessary to enlarge our knowledge of the prevailing, and different appearances of the epidemic, and endemial diseases of *this country*.

FROM

FROM these tables, it is evident, that dry, open situations, (not on the top of the highest mountains) but moderately elevated, are most healthy; in which the air is less confined, and more ventilated, and that the springs arising from these higher grounds, by being more exposed to the sun, are more pure, clear, and contain a more elastic and exhilarating air.

It is likewise evident, that *similar* situations on different soils, (the inhabitants, manner of living, and business of life, being nearly the same) are *all healthy*, though not in the same extent. Some difference likewise appears between those which are on *gret-stone, free-stone, iron-stone*, and stiff *clay*; yet their situation, air, and water, are all good, though they differ in the superficial *strata*.

THE inhabitants of *diffimilar* situations, but on *similar* soils, have different degrees of health: Thus *Winster, Buxton, Yolgrove, Matlock*, all lie on *lime-stone*, yet the inhabitants are much more healthy than those of *Laughton*, (though it lies very high) *Steinton, Maltby, or Firbeck*: The former

are more free from ouzy, moist ground, or have a purer air than the latter.

IN the same parishes, one part is often observed to be healthy, and another unhealthy, as it appears from the registers of *St. John the Baptist*, in *Thannet*, *Hatfield*, near *Doncaster*, *Bakewell* in the *Peak*, &c. For *one part* lies high, dry, open, and airy; *another* low, wet, and marshy, or bordering on *lakes*, *meers*, *fens*, *marshes*, or close by *woods*; and though some places abound, or are surrounded with quick springs, or *running* waters, or a fluctuating sea, yet if the land is *dry* and open, and the soil firm and hard, with free courses to transmit the rain, they, however, have been found to be very healthful; for it is not the moderately prevailing pure moisture in the air, but the larger exhalations from stagnating vapours, which corrupted, make such places more sickly.

THE more *solid* the soils of like kinds are, the more healthy (*cæteris paribus*) is the situation. Thus the inhabitants on *gret-stone* are healthier than those on *chalk*; on *gravel*, than on small

loose

loose sand; on strong *stiff* clay, than on *soft*. For the * springs which have passed through more loose materials are less pure, and more impregnated with them.

FROM these observations it is evident, that places on *like soils* and *solidities*, but on *different* situations, enjoy very different degrees of health; for some being high, and others low (*cæteris paribus*), the registers prove that the former are much more healthy than the latter. But the inhabitants on very high and dry situations, by being exposed greatly to intense, cold winds, and tempests, their fibres, from being more firm, will act with a greater spring on the fluids; from whence, on any suppression of *perspiration*, they are more liable to *diseases*, purely *inflammatory*. But though a situation be high, rocky, or mountainous, yet if its *surface* is constantly *moist* and wet, from an abundance of oozing small outlets, not sufficient to form *brooks*, *rivulets*, or *rills*, but numerous enough to keep the earth constantly soft and watery; the salubrity of that

* See page 184.

situation is thence greatly impaired: such places are even liable to *fogs*, and the tops of the mountains break the clouds. All these conspire to moisten the air, and to weaken and impair the solids. Hence the inhabitants are there particularly liable to *rheums*, *catarrhs*, *intermittent*, and *remittent* fevers; *tumours* of the glands, particularly of the *throat* and *neck*; all which disorders are *increased*, as the inhabitants live *lower* between these mountains*.

It appears likewise from these registers, that a dry, open, gravelly soil, obtains the next place of salubrity, after the dry, rocky, and mountainous; some such in the first table have 154 christenings to 98 burials, and in the high dry *gret-stone*, some have had a 100 of the former, to 63 of the latter.

VERY light, pure, sandy soils, though on dry and open forests, have been found to be unhealthy, because the first inhabitants in these countries,

* This appears from the registers taken of Glassop, Hayfield, Chapelle le Frith, and some other places.

not being then so sensible of the different effects of a dry, moist, gross, or clear air, or of the purity of water, generally fixed their dwellings in low, wet, spongy places, for the nearest convenience of water, and to defend them from the inclemencies of the weather ; and such water not passing through a more *solid* soil, but a more loose earthy sand, is less *percolated*, more loaded, and impure. This evidently appears in the forest registers, where the christenings exceed not 109 to 95 burials.

A LIGHT mixture of *sand* and *gravel*, or *bazel* soil, in an *open* situation, though not *elevated*, is however healthy, as appears from the *Northamptonshire* and *Norfolk* registers, where burials are to christenings, as 3 to 5. Such light soils soon *absorb* the rains ; and being remote from high mountains, to intercept and break the clouds, the country is generally dry and open, and the air pure.

THICK, strong, *stiff* beds of *clay*, at, or immediately under the earth's surface, without underlays of *porous* materials of sand, free-stone, limestone,

stone, or chalk, to *filter* the water through them, especially if flat, and without a quick declivity, are found to be *unhealthy*, though distant from *marshes, lakes, or fens*. Such situations are frequent in *Leicestershire, Warwickshire, Gloucestershire, &c.* For the stiff clay longer sustaining the water, though the ground is very fruitful, the air is wet, moist, and cold.

Low habitations, especially on stiff clay, or rotten earth, and near a level with the sea, or contiguous to great rivers, marshes, lakes, or standing waters, are the worst of all; for the air is always moist, and loaded with exhalations, often putrid. Such are the fens in *Lincolnshire, Isle of Ely*, some places in the *Holderness of Yorkshire, fens of Lancashire, washes of Norfolk, Hundreds of Essex, &c.* which have few or no hills, to send out purling springs, nor *descents* to drain their grounds. Animals, bred in such places, are more coarse, and want their genuine taste and flavour; the *burials* in these places are observed to be nearly equal to, or even to exceed their *christenings*; and in some parts, the former are to the latter as 27 to 23. The inhabitants are particularly

ticularly liable to tedious, complicated, and dangerous intermittent, remittent, and *putrid* fevers, cachexies, jaundices, dropsies, &c. These endemial disorders become more putrid among the inhabitants destined to that situation, whose low manner of living, and more confined wretched dwelling, co-operate to increase it, and want that more generous regimen, which is necessary to prevent, or to cure it. This is confirmed by Sir *John Pringle's* account of the great benefit the soldiers received from the use of the *Rhenish Wine*; and the same observation I had an opportunity of making, when some of them, who returning from *Flanders* to *England*, and thence to *Ireland*, had brought over the infection to *Dublin*, and communicated it to the other soldiers, who had been there before, and had been admitted for different diseases. It was thence, at last, distinguished by them with the name of the *House-fever*; but as in this hospital we are not confined to any expence, they received particular relief from the prudent use of *Old Hock*, diluted with water, which, though generous, is less inflammatory than any other Wine of the same strength, and the most grateful and septic cordial in putrid diseases.

THE few abstracts and observations I have made, are chiefly extracted from the first and second period of these registers: The first contains eighty-three parishes, and he has extended the other almost to his own time; but whoever compares the abstracts of every single parish in the second table, with the observations on the first table, will find that they exactly agree with the situations and soils there mentioned.

IN the third table he has given abstracts of the registers of larger towns and cities. All these registers agree, that in them there is a greater mortality among infants and children than in country places. Their constitutions are naturally more warm, and the air is less loaded with exhalations, more cold and elastic, and capable of giving a more enlarged distention, and lively motion to the lungs. It is likewise found, that the more close the houses in towns and villages stand, the smaller the rooms and windows, and more crowded with inhabitants, that they are in an equal degree more unhealthy.

IN the fourth table he has given the country registers of the sickly, or more mortal years, which were

were observed in those places, where you see the *difference* between the births and burials, in all the milder, or more severe mortalities of the last two hundred years, both in the country and towns; being in the former near 59 to 81, and in the latter about 97 to 141.

THE fifth table illustrates the former; and from the register shews the periodical returns of the more sickly annual epidemics in different parishes, which deserves a particular attention; from whence it appears, that the most frequent returns of sickly years, in the most unhealthy country parishes, is twice in five or six years, and rarely so often. The less frequent return is from once in twenty, to thirty-five years; but then some places, or parishes, have from eight to fourteen sickly years, and others but *one*. It appears from these registers, that of a hundred and fifty-one parishes, forty-three have their sickly year, from once in four, to once in six years, and twenty-six have the sickly year, from once in six, to once in eight years; which is indeed as long, if not a longer interval, than commonly happens between one visi-

tation of the small-pox or measles, and another, exclusive of all others.

THOUGH these registers are of such extensive use to form a more clear judgment of the epidemic diseases, which generally prevail in this island, and their variations from *local*, or more remote causes; yet the industrious and ingenious author has extended them to other very material uses, and has given several other tables, with his observations on them.

APPENDIX.

IT is evident from the History of the Wines of the Ancients, that all Wines consist of *similar* principles, but in a different *proportion* variously combined and united. It will be therefore less difficult, from this mutual connexion, to shew the analogy between them, and the modern Wines, which are usually imported, by making a few observations on their real, genuine qualities, and how far many of them have of late years degenerated from that state, by being mixed and adulterated in those countries, or after they have been imported into *Great Britain* and *Ireland*.

THE

THE Wines of *Champaign* and *Burgundy* are made with more care than any other *French* Wines; and the vaults in which the former are preserved, are better than any other in *France*. These Wines, from their finer texture, and peculiar flavour, cannot be adulterated, without the fraud being easily discovered, and are therefore generally imported *pure*, or by proper care may be certainly procured in that state.

THE *Champaign river* Wines are more delicate and pale, than those which are distinguished from them, by the name of *mountain* grey Wines. Both will keep well in good cellars; the former, if continued too long in the cask, acquires a taste from the wood; but in flasks is durable from four to five, and six years. The *mountain* Wines are more firm, and will continue so in the cask, for two or three years before they are bottled. These are more durable and firm, and on every account more proper for exportation, than any other *Champaign* Wines. There are several growths of each: Among the *river* Wines, the *Auvillers* and *Epernay* are most esteemed; and among the *mountain* Wines,

Wines, the *Selery* and *St. Thyery*, and, in general, such as are of the colour of a *partridge's eye*. These are likewise distinguished for their peculiar, grateful pungency, and balsamic softness; which is owing to the refined saline principle, which prevails more in them than in the *Burgundy Wines*; on which account they are less apt to affect the head, communicate a milder heat, and more freely pervade, and pass through the vessels of the body.

NOTHING is more necessary to the preservation of all Wines, than good vaults, but particularly to the *Champaign Wines*, and those of the most light texture. It is usual with the *Champenois*, when they begin to deviate from their purity, to remove them into different and colder vaults, and to rack them off into new casks, after they have been again *defecated*; but this change of situation will be much more effectual, if they are first kept for some time in a more open place, such as *airy granaries*; where they have been more restored to their former state in eight days, than they otherwise would in six months, by being only removed to different vaults. The same regimen has been

been found equally useful to *Champaign Wines*, though in the flask, when they begin to grow rosy.

To drink *Champaign Wines* in the greatest perfection, the flask should be taken from the vault a quarter of an hour before it is drank, and immersed in ice-water, with the cork so loose in it, as is sufficient to give a free passage to the air, and yet prevent too great an evaporation of its spirituous parts.

THE colour and principal difference between the red, and the other *Champaign Wines*, is chiefly owing to a certain quantity of grapes, which are now well known by the name of the *claret* grape, whose juices, when expressed, are of a rough and austere taste. These are mixed with the others in the vat, before they are committed to the press. The Wine made from them, when well *defecated*, and received into the cask, does not, like the other *Champaign Wines*, require to be often racked off into other casks, and removed to other cellars; but to be kept in the same cask and situation, near

two

two years before they are bottled, when in some time they acquire a more permanent maturity than any other *Champaign* Wine, and a grateful sub-astringent taste; on which account, they are now much esteemed for their salutary and strengthening qualities.

FOR some years the *French* and *English* have been particularly fond of the sparkling, frothy *Champaigns*. The former have almost entirely quitted that depraved taste; nor does it now so much prevail here. They used to mix some ingredients to give them that quality; but this is unnecessary, as they are too apt spontaneously to run into that state; but whoever chooses to have such Wines may be assured, that they will acquire it, by bottling them any time after the vintage, before the month of the next *May*; and the most sure rule to prevent that disposition, is not to bottle them before the *November* following. This rule has been confirmed by repeated experiments.

THE *Champaign* Wines are light and generous; and after they have acquired a firm maturity, are

very salutary. Neither are they apt to give the *gout* or *stone*, as is generally supposed; for among the inhabitants of that province, scarce an instance has been known of any one affected with either distemper, though they drink these Wines freely. But if they are drank by *gouty* persons, when the materials of it are collected on the joints, and are not sufficiently attenuated, and active to produce a regular paroxysm, these Wines will then certainly accelerate it, and bring on a *premature*, and *imperfect* paroxysm. But when the materials have been properly formed, and the paroxysm becomes necessary, and is only deficient from a too weak and languid motion of the blood, they will equally contribute to promote it, and make it more effectual and salutary.

In the same manner, *Champaign*, or any active diuretic Wines, will bring on a painful *nephritic paroxysm*, when the *calculous concretions*, formed in the *kidneys*, are not sufficiently free, and the vessels yielding; but it is evident, that the *original* formation, and increase of them, was owing to a want of sufficient motion to propel them, and
when

when from their *size*, they are incapable of passing, the *Champaign Wines*, or any active, diuretic *medicine*, which does not possess a *specific stone-dissolving* quality, must be pernicious. In such cases, the paroxysm is a *natural effort*, to disengage the affected parts; which the *Champaign Wine* will certainly promote, and become *salutary* or *injurious*, according to the state of the distemper *; but while it passes quickly through the vessels, it cannot possibly *create* either *gout* or *gravel*, which is the first, though minute *basis* of the stone, and acquires its increasing *size*, from the *urine* passing over it, which by experiments has been found, even in the most healthy persons, to possess a *stone-generating* quality. But it is not improbable, that in the early stages of each of these diseases, a moderate use of the *Champaign Wines* might, by its light *activity*, have prevented, or moderated the progressive violence of them.

BUT nothing is more pernicious †, than drinking these Wines freely when they are in a fer-

* See page 18, 19.

† See page 7, 8.

menting state, or before they have attained a firm maturity ; for while recent, they are more quickly susceptible of it in the stomach and bowels, and of separating that deleterious, active *gas*, so powerfully injurious to the nervous system. From hence such as have indulged themselves too freely, in the use of these Wines, are particularly affected with a *tremor* in the nerves, and *spasmodic* rheumatic pains.

M. ARNOUX has wrote an ingenious dissertation on the *Burgundy* Wines, which I have not seen ; but it has been translated by the ingenious Mr. *Millar*, and published in his *Dictionary*, in the article of *Vines* ; with other useful collections, relative to the making the *Champaign*, and other Wines. Several of the most eminent authors among the ancients * have wrote fully on this part of agriculture ; but very few of that character among the moderns have entered into it, farther than what relates to their general mechanic operations ; and the *Vignerons* likewise, in different vineyards, have some peculiar rules of making and preparing

* See page 31 to 37, Chap. II.

their Wines, which they rather choose to conceal, than to publish. I shall therefore extract a few material passages from this Dissertation, and make such observations on them, as may be sufficient to answer my intention.

THE principal, and finest Wines in *Burgundy*, are produced from the hills in *Upper Burgundy*, of which the city *Beaune* is the center, encompassed with several towns, and hills at different distances; but the greatest extent of them does not exceed twenty-four miles. These hills are covered with vineyards, and produce very different Wines; some of which are very light and delicate, but are not durable longer than one year, or a few months more.

THE same row of hills, in the same situation, and having the same aspect to the sun, extends almost as far as *Lyons*; and all these little mountains are wholly covered with Vines, but some soils are less fine, and friendly to the Vines, and therefore produce Wines of different strength and qualities.

THE

THE lightest, and least durable, but which soon acquire their genuine maturity, are on that account called the *Primeurs*. The first Wine of that kind is produced at *Volnet*, a village situated about three miles from *Beaune*. This hill produces the finest, and most volatile Wine in *Burgundy*. The grapes of it are so delicate, that they will not bear the vat longer than twelve, sixteen, or eighteen hours, without acquiring a bad taste from the stalk. This Wine is in colour a little deeper than the eye of a *partridge*; it is full of fire, strong, and light, almost entirely spirituous, but its *intoxicating* quality is very soon dissipated. The duration of this vintage is from one year to another: the finest of these vats is drawn from a canton of vineyards, that is called *Champan*.

POMARD is the second plot of vineyards of the *Primeurs*, and is situated between that of *Volnet* and *Beaune*. It has more body than the former, is of the colour of fire, and has a great deal of perfume and balsam; it will hold good some months longer than that of *Volnet*, is more merchantable, and better for health.

THERE is something very curious in the production and nature of these Wines, whose principles are so refined and volatile, that while they diffuse their spirituous and fragrant qualities, they more quickly decay. Mr. *Arnoux* justly supposes that they may be made more merchantable and salutary, if they were kept in colder cellars. * The common vinous juices will not ferment under the degree of thirty-six in *Farenheit's thermometer*; but when these have acquired this *rapid* fermentation, perhaps no less than that of thirty-three, (which is but one above the *freezing* point) would be sufficient to restrain it; but this may likewise prevent it from acquiring a generous maturity. It is more probable, that by adding a due proportion of some other grapes to them in the vat, of a more fixed, rough, and acid kind, the violence of the first fermentation will be more safely *moderated* and *prolonged*; and by giving a more firm *cobesion* and *union* to its volatile principles, a fine, generous, more permanent Wine may be produced, and more fit for transportation. The *claret* grape, which gives more strength and firmness

* See page 8.

to the *red Champaign* Wines, and makes them more durable, seems to be most proper for that purpose. Mr. *Arnoux* proceeds to describe six other growths of the *Primeurs*, from the hills near *Beaune*; which partake of the fine qualities of the *Volnet* and *Pomard*, without their faults. However none of them are durable above two years, except the *Chassange*; which will continue in that state three years, and sometimes four years, when the season has been favourable. This he imputes to a *saline acid* principle which prevails more in them, than any of the former, and says, that when the tartness begins to wear off, and a more balsamic softness succeeds, it is *one of the noblest* Wines in the world. He thinks this is the most proper of the *Primeurs* to be transported into *England*, as it will safely bear the agitation of carriages; neither does it ever grow ropy, or change colour in the flasks.

IN a second article, he describes the superiour qualities of the *Burgundy* Wines, which will *keep a great while*, on which account, they are called *Wines de Garde*; among which he particularly commends those, which are produced from the
hills

hills near *Nuis* and *Chambertin*. The former while recent, are rough, hard, and tart, and require to be kept till their second, third, fourth, and fifth year; and as their tartness and roughness go off, they acquire a perfume and balminess, very delicious. They are of a deep velvet colour. *Lewis* the fourteenth drank no other Wine. The *Chambertin* is generally preferred to any other Wine in *Burgundy*, as it is said to contain all the good qualities of the other Wines, without any of their faults, and on that account is sold as dear again as any Wine in *Burgundy*.

THESE Wines, by a proper application, may be certainly procured *pure*, as the precautions taken at *Beaune* must prevent any deceit; for public commissioners are appointed, to whom all who would purchase any of the Wines, must address themselves, either by letter, or in person. These are the judges, who from time immemorial, from father to son, have acquired a certain experience of all the vats and cantons, from which they are produced, and of the best cellars where they are kept. These commissioners make the purchase,

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according

according to the orders they have received from their correspondents. Neither can they exact more than a certain price, or be guilty of any notorious fraud, without the risque of hanging. But these cautions are less necessary, as they manifest their genuine qualities, by their peculiar delicate taste and fragrancy.

THE other Wines of *France* have been usually made with less care and judgment, than those of *Champaign* and *Burgundy*. Neither has any author of consequence given an exact account of them.

THE several hills near *Bordeaux*, and at different distances from it, produce a great quantity of excellent Wines, both red and white, which are in the general called *Vins de Graves*. Some of these red Wines, from a more favourable soil and situation, were distinguished for their superior qualities, and a taste peculiar to each of them. Such were the *Pontac* Wines, *Haut Brion*, *Chateau Margouze*, *Lafite*, *Latour*, &c. These principal growths were likewise made with more care, from

from the selected sound, ripe grapes, and were generally purchased by the company of vintners in *London* at a greater price. Some of the Wines of the adjacent vineyards, though little inferior to them, were sold at a more moderate price, from four, five, to six pounds a hoghead; and when the season was good, were fit for drinking the next year, and in good cellars would improve for three or four years. The duties on those Wines was likewise then very moderate; however, few, except persons of fortune, imported any for their own use, or purchased any quantity, as they were then generally imported in their genuine purity, and, in the principal taverns, you might then be sure of being supplied with those of the best kind. Neither was it worth their while to adulterate the inferior growths, as few, except persons of fortune, drank the foreign Wines, but preferred the malt liquors to them, which were made with more exquisite care, than since the use of Wines has, at length, so *universally* prevailed. This article of luxury has made the same rapid progress in *Great Britain* and *Ireland*, as it formerly did at * *Rome*,

* See page 151.

when they began, after their *Asiatic* conquests, to neglect their own vineyards, and to import the *Asiatic* and *Greek* Wines : * The same consequences succeeded ; for as the price of these Wines increased, they began to mix and adulterate them with other Wines. They no longer regarded their genuine flavour, but substituted one in imitation of it, or of a higher kind, though less agreeable than what is natural to them ; while others, by *forcing* their Vines, chose rather to produce a greater quantity of Wine, than to improve its qualities. The same scenes have been again represented in regard to the *French* Wines ; the principal growths being no longer distinguished for their peculiar flavour, when by a mixture of the *Spanish* Wines, particularly the *Alicant*, they can give more strength, and an equal, or higher flavour to their inferior ones.

THE *French* Wine merchants, encouraged by the great demands for these Wines, first began to mix their inferior Wines with the *Spanish* ; and though there was a severe law, forbidding this

* See page 113.

practice,

practice, yet it was connived at, as it increased the value, and demand for them. This encouraged some persons from hence, and *Ireland*, to reside there as *Factors*; with a view, at first, of acquiring the profit arising from the large commissions, which before had been always configned to the *French* merchants. But these factors soon became likewise Wine merchants, among whom it was usual to employ their *Tasters*, after the vintage was over, to examine the new Wines, and when they had been properly informed, purchased such a quantity, as was sufficient to answer the demands they expected. These were soon after mixed and prepared with the *Spanish* Wine, which added more strength and flavour to them. Thus the price of them was gradually raised much higher than the Wines of these growths had been formerly estimated.

THE addition of the *Spanish* Wines would not have been so much injurious to the weak *French* claret, if they naturally incorporated and preserved their union and transparency; but this cannot be obtained, without forcing them into a new fermentation,

mentation, which adds more *spirit* to the *Spanish* Wine, while it enervates the *French* Wine, dissipates entirely its native flavour, and gives it a tendency to an *acetous* kind of acrimony.

HOWEVER these Wines are often more injured, after they are imported, than they had been in *France*, by committing them to the conduct of our modern artists, who mix them with other fermented liquors, and unite them by a repeated fermentation.

By these arts we have been almost entirely deprived of any genuine claret Wines, which had been so long esteemed for their grateful, and salutary qualities. Few now can even recollect the peculiar taste of their first growths, in their former genuine state, or drink them in their present depraved state.

Thus the *French*, by first mixing their Wines with those of *Spain*, and raising their price, lost their commission business, and the Wines their reputation. The proprietors of these vineyards have lately

lately applied to the parliament of *Bordeaux*, to procure a law, that no Wines for the future shall be exported, without having on them some stamp and certificate, that they had not been mixed with any *Spanish* Wines, since they were delivered by them in their original state ; which has been strongly opposed by the factors and Wine merchants there ; however they will either prevent, or find out some art to elude it ; and Wines which have lost their character very seldom, or ever, regain it.

It is therefore no wonder that the *Port* Wines are now universally preferred to the *French* claret ; but as the demands for them, and their price, have greatly increased, it is not improbable, but that they will meet with the same fate as the *French* Wines ; for though they still maintain their character, yet they certainly are more heavy and heating than they formerly were, and require more time, after they have been bottled, to bring them to a proper maturity. Several of these Wines are frequently adulterated here, which is not to be imputed to the *Portugal* merchants ; and it is well known,

known, that large quantities of *nominal Port Wines* are made here, without any *Port Wine* in them.

THE principal *Portugal* vineyards are in the possession of merchants from *Great Britain* and *Ireland*, who have raised the *original* price of them, far beyond what it was, when they were in the possession of the *Portuguese*. This has been complained of by the natives, and particularly by those in the army, and was so far resented by the king, that they have been deprived of several privileges and emoluments, which they formerly enjoyed, and for the redress of them have made remonstrances; so that their principal profit now arises from those which they *export*; and it is remarkable, that there is scarce any place from whence any considerable quantity of foreign Wines is now exported by the natives, but by factors who reside there; so that we lie entirely at their mercy for the *price*, and *purity* of their Wines. The former may be a restraint to the luxury of some, without injuring their health; but the latter must be a very material article to the infirm and valetudinarians, whose health entirely depends on observing

ing an *equal* regimen of diet, and when long *habituated* to it, cannot, without *danger*, suffer any change; especially in their advancing old age, by being deprived of the most animating and generous part of it. This observation has been early made by *Hippocrates*, and confirmed by experience; but in no instance more remarkably than in that of the *declining* strength of *Cornaro*, when the Wine which he usually drank, began to be depraved, and to want its usual spirit; and his quick *revival* after the vintage, from the greater strength and fragrancy of the *recent annual* Wine. From hence it is very evident, that few subjects are more deserving of our attention, than to find in what manner we may be supplied with good, and genuine Wines in the increasing scarcity of them; and by what precautions, or opening some new branches of commerce, we may be supplied, when such Wines are either not *imported*, or *sold* here. Neither does the prospect seem to be at a very great distance; for no art or fraud will be wanting, when they can be exercised with impunity, and succeeded with profit.

WE seldom meet with any good Wines imported here from *Italy*. The *Chianti* was formerly much esteemed in *England*, but entirely lost its character; large quantities of the red *Florence* are still imported in flasks; but from the disagreeable roughness, and other qualities, seldom drank. They have a freshness, and beautiful deep colour, and are probably chiefly consumed in making artificial claret, or *Burgundy* Wines, or in giving more lightness and spirit to heavy vapid port.

No country was formerly more celebrated for its Wines than *Spain*, and still produces several valuable Wines, but they are seldom now imported pure. The *Canary* Wines, within my memory, were annually sent in large quantities on their lees to *England* and *Ireland*, and universally esteemed. Nor were they less celebrated for their salutary qualities; and were more frequently directed to answer several medical intentions, than any other Wine: but these for some years past have entirely vanished, and are now mixed with some other Wines to improve them, and enhance their price.

THE

THE *Madeira* Wines are now universally drank in *England*, and a much greater quantity of them is consumed in *London* with that name, than the whole island produces. The greatest part of these Wines are carried from thence to the *East*, and *West Indies*, and are much improved by the agitation of long voyages, and the heat of those climates; some of them in that refined state, we frequently meet among the opulent gentlemen, who return from those places. The *Vidonia* Wines, which are produced in another *Spanish* island, somewhat resemble them in their taste and flavour, though less agreeable, and more heavy. These Wines are chiefly used in making the *Madeira* of even the best kind, which is usually sold here; however several generous, and more light *Spanish* Wines, are still imported, and by a proper application may be procured in their genuine state. Among these the *Sherry* has been long distinguished; and the *Pacaretti* is now much esteemed for its light, delicate taste, and fragrantcy.

THE *Greek* Wines produced from several islands in the *Archipelago*, are often mentioned by *Hip-*

pocrates, particularly the *Cbian*, *Coan*, and those of *Crete*, or *Candia*; which long before his time was not less celebrated by *Homer* for its Wines, than the number of its cities. * When this island was under the dominion of the *Venetians*, the Wines were made by the same rules, which, for many successive ages, had been delivered down to them from their ancestors; and were so much esteemed for their superior qualities, that they were exported in large quantities to different parts of *Europe*; though since they have been in possession of the *Turks*, who cultivate no vineyards, and from the indolence of the *Greeks*, they are now made with less care. However, that soil and climate are so spontaneously friendly to the Vine, that several excellent Wines are made there, and may easily be procured in their genuine state; but as from their peculiar fine flavour, they are not easily adulterated, they are seldom imported.

BUT no country is at this time more fertile of various excellent Wines than *Germany*. *Frederic*

* See page 137, 138, 139.

Hoffman * has made several useful observations on the nature and qualities of different modern Wines, but has more exactly described, than any other author, not only the natural, but the medical qualities of the Wines of his own country, and particularly the *Rhenish* Wines. This eminent physician had formed his practice from the rules given by *Hippocrates*; and particularly in directing his attention to the more *evident* qualities of the several materials of diet, than of medicines, which are more obscure, and † earnestly recommends the investigation of their medical qualities, as they may with more certainty be *known*, and their efficacy depended on, than in any of the various medicines, with which they were so largely supplied from distant countries.

* *Dissertationes Physic. Medic.* IX. tom. ii. cap. 2. Edit. 8vo. Lugd. Batav.

† Optandum vehementer esset, ut quisque medentium, ad *Res*, sic appellatas a medicis *non naturales*, animum majore studio et industria componeret, eorumque vires, in sanandi negotio penetrando ostenderet, plus hinc ipsis sæpe profici, quam si ex remotissimis locis, & materia, humanæ naturæ plus inimica, quam amica, petantur ac desumantur tot remediorum classes.

Proœmium de Vini Rhenani. præstantia, tom. ii. p. 79.

AMONG:

AMONG these articles of diet, he ascribes the most powerful qualities to *Wine*; * but dwells more particularly on the different qualities and virtues of the *German Wines*, in which he has been more confirmed from his long experience of them; and gives a singular character and preference to those, which are produced from some particular hills adjacent to the *Rhine*.

THE principal growth is called *Hock*, from *Hockheim*, a village contiguous to it, and another near to it, which likewise produces an excellent *Wine*, though somewhat inferior to the former. He enumerates various other growths of *Rhenish Wines*, which derive their names from the towns and villages adjacent to them, and observes †, that they all deviate in their strength and value, in proportion as they are more distant from the *district* of the principal growths.

* De presenti hoc laboris suscepimus, et præstantissimum Vini maxime Rhenani usum in medicina, solida experientia, non minus quam exacto ratiocinio suffulti, demonstramus. Ibid.

† Et notabile est quod Vina quæ non procul ab hac urbe circa Rhenum reperiuntur, reliquis Rhenanis sunt meliora.

THESE

THESE Wines, though frequently adulterated, may be with certainty procured in their genuine state, by a proper application to any of the proprietors of those large vaults, in which they are preserved. But they never sell less than a certain measure, which contains about eight or nine *Aumes*. These Wines are particularly remarkable for being durable, and improving in strength and flavour, in proportion to their age. This is owing to the large quantity of tartar, or essential salt, which prevails in their recent state; but it is slowly separated from them, and what remains becomes more refined, while the *oleaginous* parts, which closely adhered to the tartar, are more disengaged, and diffuse a greater fragrance and colour. But when they have attained this full maturity, and their different principles are refined and united in a just proportion, they cannot possibly, by a greater age, acquire more grateful, or salutary qualities.

ANOTHER material circumstance that greatly contributes to their more secure advancement in age, proceeds from the annual addition of a due proportion of the recent new Wine, of the same growth

growth to them. But after they are imported here, and placed in less convenient vaults, and their vigour is no longer renewed with recent Wines, they will more quickly become pale and soft, from being deprived of a due proportion of their saline and spirituous parts, and lose their transparency. A friend of mine regarded no expence in procuring the best Wines, especially *Old Hock*, which he purchased at fifty pounds the *Aume*; and as he designed to send for a new supply, I desired the favour of him to procure one for me of the same growth, of less age, and half the price; and on my making some observations of this kind, he said he would likewise send for another for his own use. Both Wines were excellent; to me the Wine of the inferior age was rather more agreeable; and for the future he said he would always send for an equal quantity of each. This prejudice in favour of old Wines prevails too much among us, as it did with some of the ancients. * *Pliny*, and the best physicians, preferred Wine in its *middle* age, to that which was more advanced.

* See page 76.

SEVERAL

SEVERAL districts of this country abound with vineyards, that produce Wines which in many respects differ from the *Rhenish*, that are of a more soft and spirituous kind, and are in the same proportion esteemed by them, as these principles prevail more in them, than the saline acid. Among these he describes a particular growth of * *Rhingavian* Wines, distinguished for their superior qualities; these he ascribes to the singular nature of the soil, and a grape planted there called *Orleans*, which acquires a rich maturity in that place, and in no other of *Rhingavia*.

THESE Wines improve by age, and are very grateful and salutary, and contain only such a light proportion of acid, as makes them more apt to excite the appetite. On this account, the inhabitants of this country greatly prefer them to

* Cæterum Rhingavia, nobilis et delicati Vini abundat copia: præstantissimum habetur Rudesheimense quod spirituositate et ob acidi defectum gratia reliquis Rhingaviæ Vinis præcellit: exprimitur enim ex uvis peculiaris speciei dictis *Orleans* quæ tantum in certo monte et in nullo alio Rhingaviæ loco perfectam maturitatem et dulcedinem acquirunt.

the *Rhenish*, and they are annually sent * to the principal places in *Germany*, where it is very difficult to procure any *Old Hock*, which is sold at a much higher price, and chiefly transported to *Holland*, *England*, *Hamburg*, and *Lubec*.

He then proceeds to describe the Wines of several other districts, and their different qualities; but prefers the *Hock* Wines to any other of that country, for their salutary and medical qualities. Though generous and durable, they are less heating, or apt to affect the head, and more equally promote all the *excretions*, than any other Wines of the same strength; but they are more eminently useful for their *antiseptic* qualities, in all diseases, where the humours are disposed to a putrid state, especially in low fevers of that kind.

NEITHER is the vinegar made from the *Rhenish* Wines † less valuable for its superior qua-

* *Misnia*, *Thuringia*, *Saxonia*, *Marchia*, *Silesia*: *Causa vero cur tam rara avis in his terris sit verum Rhenanum, hæc videtur, quod hi homines blando et dulci sapore plusquam grato acido, delectentur: maxima pars Vini Rhenani veteris proprie sic dicti in Belgium, Angliam, Hamburgum, Lubecam, navibus excepta. Rheno et mari transfertur. Ib. p. 97.*

† See page 23, 24, and 25.

lities * ; and so far exceeds that which is produced from any other Wines in these countries, that one ounce of the former is computed to be equal in strength to four ounces of the latter. It would be therefore well worth while, as the best *Old Hock* is imported from *Frankfort*, to procure, at the same time, a sufficient quantity of this vinegar.

He particularly commends the *Moselle* and *Ni-karine* Wines for their light and grateful qualities, and being more equally tempered with their saline and spirituous principles, but they are not durable; and if not carefully preserved, are very apt to grow vapid, and quickly decay.

BUT as no modern Wines are less known, and more deserve our attention than the *Hungarian* Wines, which the same learned author says †, yield

* Jam vero celebratissimum est, quod Francofurti parant ex Vinis Rhenanis acetum, propter suum acorem fortem et penetrantem nobile in primis, cum unciae unæ plus præstet virium, tam in medicinae quam oeconomia quam unciae quatuor hujus loci. Chap. V. page 128.

† Vina generosa Italicis et Hispanicis non postponenda; Germaniæ autem Vinis merito præferenda. Tom. ii. p. 88.

to none of the best *Italian* or *Spanish* Wines, and are superior to any in *Germany*. I shall make a few observations on the description he gives of the several districts from whence these Wines were produced, and the peculiar qualities he ascribes to them from long experience, and on whose judgment and integrity we may entirely depend.

THIS country then abounded with a variety of excellent Wines*; but the *principal* growth was distinguished with the name of *Tokay*, from a high mountain, on whose summit the Vines were planted, which produced this celebrated Wine, and whose soil, from its yellow colour, he supposed was impregnated with some mineral golden qualities, which added a peculiar richness to them; but this was more justly owing to its sulphureous qualities, which were likewise more effectual for that purpose.

* Est autem primi ordinis Toccaviense, quod in cacumine altissimi montis, qui in sinu auri mineras fovet, non adeo insigni copia provenit, sed delicatissimum, et hinc tantum in aulam Imperatoris deferitur; spectat huc quoque Toccaviense secundarium, quod erescit in eodem districtu: secundum locum obtinent Vina Tarnaviensia et circa Groz Warden. Tom. ii. Ch. II. p. 88.

THE Wine produced from this mountain was more remarkable for its *superior* and delicate qualities, than for the *quantity*, which was *entirely* sent to the emperor; but there was another *secondary* Wine of the same district, likewise called *Tokay*, though inferior to the former; the next to these in esteem were in two different adjacent districts.

AFTER having first mentioned these principal districts, he takes particular notice of a Wine, though in one more distant, called *St. George Ausbruch*, which was made by a *singular process*, but not inferior in its qualities to any, except the principal *Tokay*. * The grapes from which this Wine was made, were suffered to remain suspended on their branches, after they had acquired a full maturity, until they were *half dried* by the continued heat of the sun. They then collected them,

* Hoc Vinum Sancti Georgii *Ausbruch singulari* artificio paratur: maturiores, ibi et semipassos, a minus maturis separant, ex uvis acinos: ex quibus (non secus ac Italiâ Lachryma Christi) expriment succum, qui *promanans*, et *asservatus*, gustum summa suavitate afficit et propter gratam nervis et spiritibus generositatem totius œconomiae animalis vires, et functiones egregie recreat et sustinet.

separated

separated the grapes from their stalks, and those that were well dried, and more rich, from the others. And in the *same* manner, in which the *Italians* then made a Wine, (from its superior qualities, called by them *Lachryma Christi*) by a *light* pressure they obtained, and separately preserved the expressed juices, which first *slowly flowed*. He describes the grateful and generous qualities of the Wine thus produced, and its peculiar influence on the nervous system and animal spirits, not only in raising all the functions of the animal economy, but supporting them. * He then mentioned that a *second* Wine was made from the *remaining grapes*, by a stronger pressure, but inferior to the former, both in strength, price, and taste.

He mentions several other districts productive of a great variety of these Wines, which are universally light and grateful. The principal growths possess a greater proportion of a more exalted *olea-*

* *Imbecilliora* autem, et saporis paululum acidiusculi, nec non adeo caro pretio venduntur, quæ ex reliquiis uvarum, in dicto Sancti Georgii oppido conficiuntur. Dissert. Physico Medico IX.

ginous

ginous principle, than of the *saline acid*; to these
 * he finally ascribes their generous and salutary
 qualities, which, he says †, he had experienced in
himself and *others*. They neither offend the head,
 or nerves, but are rather more useful in all *spas-*
modic and *hypochondriac* diseases, than even the
Hock, or any other Wine, where the *acid, saline*
quality prevails.

SOME of these Wines have peculiar and singular
 properties. They are more altered by being ex-
 posed to the air, than any other Wines. Their
 natural white colour is changed into a deep yel-
 low; they lose their transparency, and these
 changes are sometimes quickly fatal to them. The

* Tandem (atque boni Vini character est) agilitatem, vigorem
 et levitatem largius potum in toto corpore relinquit; manifesto
 documento, ex ejus usu spiritus nec non vitalem circulum excitari,
 et insensibili modo hoc quod gravat, quod molestum est sanguini,
 evacuari.

† Hoc Vinum saluberrimum judicamus ipsa teste experientia:
 Neque enim gravat dolore caput: etiam liberalius haustum, modo
 non fuerit adulteratum, neque nervos afficit, ut potius in affectibus
 spasmodicis, podagrâ, scorbuto, hypochondriaco malo, præferatur
 Rhenano aliisque quæ admittunt multum acidi in mixturâ. Page
 90, 91.

air

air has this peculiar influence on all the other *Hungarian Wines*, except the *Tokay*, the *Ausbruch* of *St. George*, and another Wine, called *Rustianum*, when the vintage has been favourable to it; but all these Wines, when *well made* and *preserved*, are durable many years.

ANOTHER singular circumstance in all the *Hungarian Wines* is, that they immediately deviate from their former state, by being mixed with any *Rhenish Wine*, or any acids, and soon decay. He likewise observes, that these Wines, after being well made and *defecated*, and received into new casks, acquire more strength, by remaining for some time on any returning lees, before they are bottled.

WE are much obliged to Mr. *Douglas* for his exact account of the present state of the *Tokay*, and other *Hungarian Wines*, which has been lately communicated * to the *Royal Society*; and though this seems in many respects to differ from

* An Account of the *Tokay*, and other Wines of Hungary, by Silvester Douglas, Esq. communicated by Edward Poore, Esq. F. R. S. Vol. LXIII. 1774. Page 291.

that

that which had been given by *Hoffman*, yet both are equally true, and agree in every *material* circumstance.

THIS gentleman observes, “ that it is a vulgar error, that the quantity produced of the *Tokay* Wine is small, and that the greatest part of it belongs to the Empress-queen ; whereas the quantity now produced is very great, and belongs to various proprietors, and that the prince of *Trautzon* is the chief proprietor, and that the extent of the *Tokay* district, and its several hills, extends from the town of *Tokay* westward, and northward from thence, and occupies a space of perhaps ten *English* miles square, interspersed with several extensive plains and villages. Near some of these, particularly *Talia* and *Tarezal*, the Wine is better than what grows on the hill of *Tokay*, but it all goes under the same general name.

“ THE vintage is always as late as possible ; for they leave the grapes on the Vines as long as the weather permits, as the frosts which from the end of *August* are very keen, during the nights, are

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thought to be of great service to the Vines. By this means a great many of the grapes are shriveled, and have, in a great measure, the appearance of dried raisins.

“ THERE are four sorts of Wine made from the same grapes, by the names of *Essence*, *Auspruch*, *Masslasch*, and the common Wine.

“ THE process for making them is as follows :

“ THE half-dried and shriveled grapes being carefully picked out from the others, are put into a perforated vessel, where they remain as long as any juice runs off, by the mere pressure of their own weight. This is put into casks, and is called the *Essence*.

“ ON the grapes from which the *Essence* has run off, is poured the expressed juice of the others, from which they have been picked, and they tread them with their feet. The liquor obtained in this manner, stands to ferment for a day or two, after which it is poured into casks, which are kept in the
air

air for about a month, and afterwards put into the cellars. This is the *Auspruch*.

“ THE same process is again repeated, by the addition of more of the common juice to the grapes, which have already undergone the two former pressures; only they are now also wrung with the hands, and this gives the *Masslasch*.

“ THE fourth kind is made by taking all the grapes together at first, and submitting them to the greatest pressure. This is probably entirely consumed in the country, and forms the common *Vin du Pais*.

“ THE *Essence* is thick, and never perfectly clear, very sweet and luscious. It is chiefly used to mix with the other kinds; and when joined to the *Masslasch*, forms a Wine equally good as the *Auspruch*, and often sold for it.

“ THE *Tokay* Wines, both the *Essence* and *Auspruch*, are very durable, but not fit to drink till they are about three years old.”

It is very evident from this account, that there is no material difference between the manner of preparing the grapes in making the modern *Auspruch Tokay*, and that formerly used in *Hoffman's* time, in the district only of *St. George Auspruch*. This process is particularly described by him, as it was used by the *Italians* in making the Wine called *Lachryma Christi*, and had been the universal practice of the ancients in making their finest Wines, whose rules were for successive ages observed by the *Greeks* and *Italians*, and for many years past have prevailed in most parts of *Europe*, where the best Wines were made. The *French* particularly have for some time adopted them, in making their richest *Frontignac*, *St. Laurence*, and *Muschadine* Wines. It is likewise usual, in making some of the *Champaign* Wines, to separate and collect the juices which first flow by their own, or a light additional weight, from whence very rich and generous Wine is produced from them, called *Vin de Goute*, or not improperly the *Essence*. Some of these very fragrant Wines are separately kept for private use; but they are generally mixed with

with the *Champaign* Wines, made by a successive, stronger pressure on the remaining grapes, to improve their taste and flavour.

It likewise appears, that the Wines of the *Tokay* mountain, and all other districts (except *St. George*) were then made in the usual manner from the grapes, immediately after they had acquired a full maturity ; but as the *Tokay* district was then very confined, it is not surprising that it was solely, as *Hoffman* observed, applied to the Emperor's use ; and from the particular privileges which have been granted to the proprietors of this extended district, it is not improbable but that the whole consists of several royal fiefs. This seems to be confirmed by what Mr. *Douglas* observes, that the largest share, which prince *Trautson* then possessed, would revert to the crown after his death.

It is likewise evident, that though in *Hoffman's* time the *Auspruch* Wines were only made in this singular manner in the district of *St. George*, yet since the *Tokay* district has been extended ten or twelve miles square, all the Wines produced from thence were

were made by the *Auspruch* process, and called by the same name; and that the commerce arising from them, was solely granted to the proprietors of it.

THE account which afterwards Mr. Douglas gives of * the *present* state of the Wines of *St. George Auspruch* is very remarkable, and not only confirms these observations, but shews the progressive improvement of these Wines. "The *St. George* Wine grows near a village of that name, about two *German* miles north of *Presburg*, and in the same latitude with *Vienna*. This Wine approaches nearest of any *Hungarian* Wine to the *Tokay*. Formerly they used to make *Auspruch* at *St. George*; but this was prohibited by the court sixteen years ago; it being supposed it might hurt the traffic of the *Tokay* Wine. The prohibition shews, that the method of preparing the *Tokay* is thought to have a share in its peculiar qualities." But had he been acquainted with the description given of them in their former state, he would easily have known, that this prohibition was then

* See Phil. Transf. Vol. LXIII. page 300.

absolutely

absolutely necessary, to promote the commerce of the new district; as the former had been the *original*, and long established *mart* of these celebrated Wines. They now are reduced to the necessity of making their Wines in the common manner, while the memory of their former flourishing state will only be preserved, by giving the name of *Auspruch* to the Wines of this royal district."

Mr. *Douglas* has much enlarged our knowledge of the *Essence*, and the *genuine* nature of the *different Tokay* Wines now made from it, and has given the best directions for being supplied with them.

THE *principal Auspruch* Wine is made, by impregnating the Wine made from the *second* pressure of the grapes, with a certain proportion of the *Essence*. This is the *Tokay* now usually drank at the Empress's table, and no other; of which presents are often made to foreign ambassadors. The price of this Wine has, within a few years, much increased, from the great demands made for it. the Empress of *Russia* has an agent, who constantly resides

resides there, and annually purchases from forty to sixty *Antheils* of *Auspruch*, but never of any other sort. An *Antheil* is a small cask, which contains eighty *Hungarian Mediae*, a *measure* equal to about two thirds of an *English* quart.

AN *inferior* kind of the *Auspruch* is made, by impregnating the *Massflasch*, or Wines of the third pressure, with the *Essence*, and probably in a less quantity. These Wines, however, are greatly esteemed, but are easily distinguished by their more *austere* taste, which they acquire from the stronger pressure on the grapes, in whose skin this quality chiefly resides. The *Poles* are particularly fond of this astringency in these Wines, which they call the *taste* of the *root*; and great quantities of it are transported to that country.

THOUGH the privilege of making the *Auspruch* is confined to this district, yet several have found the art of greatly improving their common Wines, by adding a very small quantity of the *Essence* to them, which must in time lessen the commerce of the *Auspruch*; but this can easily be prevented,
by

by either forbidding the sale of the *Ausbruch*, or greatly raising the price, which he observes, in these few years has so far increased, that the *Antheil*, or small cask, which at a medium was sold from forty to sixty ducats, soon rose to a hundred, and that Prince *Ratzvill* paid three hundred ducats for two *Antheils* four years ago. This variety in the price of the *Essence* and *Ausbruch*, accounts for the opposite relations given of the different prices of these Wines.

Mr. *Douglas* observes, that no country in *Europe* produces a greater quantity and variety of excellent Wines than *Hungary*; and that he was told at *Vienna* of an entertainment given to the Empress-queen at *Presburg*, by an *Hungarian* nobleman, where above a hundred different Wines were produced of the growth of that country. Some of the common Wines, though excellent in their kind, are sold very cheap; of these I shall give two remarkable instances.

“THE *Buda* Wine is very like *Burgundy*, and perhaps equal to it. A German author of the

last century says *, that a great quantity of this Wine used to be sent to *England*, in the reign of *James* the first, over land, by *Breslaw* and *Hamburg*, and that it was the favourite Wine of the court, and all over the kingdom.

“ THE *Sexard* Wine is strong, and deep coloured, not unlike that Wine of *Languedoc*, which is said to be sold at *Bordeaux* for claret. The *Sexard* Wine on the spot costs only about five *Criutzers*, or two-pence half-penny a bottle. It belongs to the abbot of *Constance*, and is chiefly consumed in *Germany*. *Sexard* is on the *Danube*, between *Buda* and *Esset*.”

I REMEMBER several years ago a report prevailed, that the Empress-queen, from a grateful sense of the obligations she owed to this kingdom, had proposed to open a commerce from the port of *Trieſte*, for more easily supplying this country with several of the *Hungarian* Wines, as the land-carriage, which was the most expensive article, would be much lessened, by the situation of many of them,

* Hevelius Sileſiograph. 2 Vols. Art. *BRESLAW*.

being

being at no great distance from the *Danube*; on which they may be transported a considerable part of the way to *Trieste*, though with some interruption of the land-carriage. But as we were then supplied with good Wines from *France*, *Spain*, and *Portugal*, or as the Wine-merchants did not chuse to alter the course of the Wine-trade, this proposal was no farther pursued. But it is some pleasure to reflect, that by this channel, in some other more convenient time, we may be supplied with a variety of strong and light Wines in their native purity, and at a moderate price; when very probably none will be imported, or *fold* in their genuine state, though charged at an extravagant price.

I HAVE dwelt longer on these accounts given by *Hoffman* and Mr. *Douglas*, of the *Hungarian* Wines, as in this *united* view they are mutually illustrated, and greatly enlarge our knowledge of their *former* and *present* state; and as the latter more immediately engages our attention, we are particularly obliged to Mr. *Douglas*; while that eminent physician has fully described their natural

and medical qualities, which were not within the province of Mr. *Douglas*, or could be expected from him.

FROM this History of the Ancient and Modern Wines, we may be capable of forming a more true judgment of the various nature and qualities of Wines, which, in the general, are chiefly owing to the *climate* and *soil*. It is very remarkable, that the grapes of all Vines planted within the *fifty-first degree* of the *northern latitude*, acquire such a degree of strength, as renders them fit for producing good Wine, in which the *terrene* and *saline* principles prevail, though they are more refined and corrected, as they advance to maturity; but as the climate advances more to the south, they acquire more strength, and the *oleaginous* and *spirituous* principles prevail, and in any considerable *quantity* cannot be *salutary*, without being diluted with *water*; on which account, the Wines produced in temperately warm climates, where the principles are more *equally blended* and *united*, are more light, though generous, more salutary, and agreeably adapted to promote social happiness, than

than those produced in either *extreme*: Such are particularly the *French, Hungarian, Italian,* and some of the *Spanish* and *German* Wines. * *Hoffman's* observation is very curious, that one half of *Germany*, which is to the north of this vinous latitude, is entirely destitute of any good Wine, while the other half abounds with fertile vineyards, and a variety of good Wines; and likewise shews, that a very moderate addition to the warmth of the climate is sufficient to produce excellent Wines; in which the *soil* principally, with other circumstances, has at least an equal influence with the warmth of the climate, and in some instances a greater, in giving the peculiar, grateful qualities, for which some Wines are distinguished. Of this several instances are known, where not only in the same climate, but in places very nearly adjacent,

* Curiosum et perquam dignum observatione est, dimidiam Germaniæ partem boni Vini genitricem esse, videlicet eam quæ plagæ australi propinqua est. Quæ vero ad septentrionem spectat vel plane vinorum experta est, vel ea valde acida et tenuia profert. Sique consulimus geographicas tabulas, speculari ibi jucundum est, eas omnes ferme regiones ad alendas vites, et bonum Vinum producendum inidoneas esse quæ ultra 51 gradum elevationis poli sitæ sunt; et quo remotiores sint a polo septentrionali, et meridionali viciniore, eo generosius et fortius Vinum producant.

Differt. Physico-Medic. IX. cap. ii. p. 87.

from

from the same Vines, and in the same situation, and aspect to the sun, very different Wines are produced, which can be only owing to the *soil*.

FROM hence it is evident, that good Wines may be made in several parts of *England* and *Ireland*, which are within this vinous latitude. The ingenious Mr. *Miller* shews from ancient records, that in many parts of *England*, and particularly near *abbeys* and *monasteries*, good Wines were made, and that these places are still distinguished with the name of Vineyards ; but how they were rooted up and neglected, there are no clear accounts left. He likewise observes, that an obstinate prejudice has prevailed against making any farther trials, from some improper ones made near *London*, where the *soil* is not *friendly* to the *Vines*, and where the Wines were so injudiciously made, that under the same disadvantages neither those of *Italy* or *France* would have succeeded. He therefore, with his usual modesty and candour, gives his opinion, founded on some trials, which he had seen made, and the instructions he had received from several persons abroad, who cultivated vineyards for
their

their own use, and that of their friends, and who have been very exact in observing the several methods of practice amongst the *Vignerons* of those countries; from whence he hopes, that the prejudice which still prevails against any project of this kind might be removed, or at the least suspended, until some farther trials shall have been more judiciously made, which he then proceeds to direct. But had he been acquainted with the success which attended the vineyards of my ingenious friend, the honourable *Charles Hamilton*, who has been long distinguished for his peculiar elegant taste, he would have spoken with more certainty. To him I am particularly obliged for the following exact description which he has, at my request, given of the rules he had pursued, and which he has given me leave to publish.

“THE vineyard at *Painshill* is situated on the south-side of a gentle hill, the soil a gravelly sand; it is planted entirely with the two sorts of *Burgundy* grapes, the *Auvernat*, which is the most delicate, but the tenderest, and the miller grape, commonly called the *black cluster*, which is more hardy. The first year, I attempted to
make

make red Wine, in the usual way, by treading the grapes, then letting them ferment in a vat, till all the husks and impurities formed a thick crust at the top, the boiling ceased, and the clear Wine was drawn off from the bottom.

“ THIS essay did not answer ; the Wine was so very harsh and austere, that I despaired of ever making red Wine fit to drink ; but through that harshness I perceived a flavour something like that of some small *French* white Wines, which made me hope I should succeed better with white Wine. That experiment succeeded far beyond my most sanguine expectations ; for the very first year I made white Wine, it nearly resembled the flavour of *Champaign* ; and in two or three years more, as the Vines grew stronger, to my great amazement, my Wine had a finer flavour than the best *Champaign* I ever tasted ; the first running was as clear as spirits, the second running was *cœur de Perdrix*, and both of them sparkled and creamed in the glass like *Champaign*. It would be endless to mention how many good judges of Wine were deceived by my Wine, and thought it superior to any

any *Champaign* they ever drank; even the duke *de Mirepoix* preferred it to any any other Wine; but such is the prejudice of most people against any thing of *English* growth, I generally found it most prudent not to declare where it grew, till after they had passed their verdict upon it. The surest proof I can give of its excellence is, that I have sold it to Wine-merchants for fifty guineas a hoghead; and one Wine-merchant, to whom I sold five hundred pounds worth at one time, assured me, he sold some of the best of it from 7s. 6d. to 10s. 6d. per bottle.

" AFTER many years experience, the best method I found of making and managing it was this. I let the grapes hang, till they had got all the maturity the season would give them; then they were carefully cut off with scissars, and brought home to the Wine-barn in small quantities, to prevent their heating, or pressing one another; then they were all picked off the stalks, and all the mouldy, or green ones, were discarded, before they were put upon the press; where they were all pressed in a few hours after they were gathered; much would

run from them, before the prefs squeezed them, from their own weight upon one another. This running was as clear as water, and sweet as syrup, and all this of the first pressing, and part of the second continued white; the other pressings grew reddish, and were not mixed with the best. As fast as the Wine ran from the prefs into a large receiver, it was put into the hogheads, and closely bunged up. In a few hours one could hear the fermentation begin, which would soon burst the casks, if not guarded against, by hooping them strongly with iron, and securing them in strong wooden frames, and the heads with wedges; in the height of the fermentation, I have frequently seen the Wine ouzing through the pores of the staves.

“ THESE hogheads were left all the depth of winter in the cool barn, to reap the benefit of the frosts. When the fermentation was over, which was easily discovered by the cessation of noise and ouzing; but to be more certain, by pegging the cask, when it would be quite clear; then it was racked off into clean hogheads, and carried to the vaults,

vaults, before any warmth of weather could raise a second fermentation. In *March*, the hogshheads were examined ; if any were not quite fine, they were fined down with common fish glue, in the usual manner ; those that were fine of themselves were not fined down, and all were bottled about the end of *March* ; and in about six weeks more would be in perfect order for drinking, and would be in their prime for above one year ; but the second year the flavour and sweetness would abate, and would gradually decline, till at last it lost all flavour and sweetness ; and some that I kept sixteen years became so like *Old Hock*, that it might pass for such to one who was not a perfect connoisseur. The only art I ever used to it, was putting three pounds of white sugar-candy to some of the hogshheads, when the Wine was first tunned from the press, in order to conform to a rage that prevailed, to drink none but very sweet *Champaign*.

“ I AM convinced much good Wine might be made in many parts of the south of *England*. Many parts are south of *Painsbill*, many soils may

be yet fitter for it, and many situations must be so; for mine was much exposed to the south-west wind (the worst of all for Vines), and the declivity was rather too steep; yet with these disadvantages it succeeded many years. Indeed, the uncertainty of our climate is against it, and many fine crops have been spoiled by *May* frosts, and wet summers; but one good year balances many disappointments.

“CAPTAIN *St. Pierre*, who has established a great colony of vigneron in *South Carolina*, and carried there three years ago above three hundred vigneron from different parts of *Europe*, was with me several days before his departure, was charmed with my vineyard; and he had cultivated vineyards many years in *France*. He was very happy at my giving him all the cuttings of my vineyard, as he found it very difficult to get the right sort; and though his plantations are about the latitude of 33, he has not the least doubt of having excellent Wine there, which if he has, must be of infinite service to this country.”

No

No trials of this kind have been made in any place in *Ireland*, where the latitude is the same as in *England*, and the soil and situation seem, in some respects, to be more friendly to Vines, particularly in the most southern parts of the county of *Corke*, which in the general is an hilly open country. Many of these hills are at a moderate distance from the sea, with a favourable south-east aspect to the sun; and from their gradual elevations, are defended from the northerly winds. Several inland places are rather more favourably exposed, and warmly defended, with large rivers adjacent to them. It has been often observed by the ancients and moderns, that the Wines produced from hills exposed to the sea-breezes, and those arising from rivers, have been chiefly distinguished for their superior qualities. This evidently appears in the river *Champaign* Wine, and those made in the islands of the *Archipelago*, and the *Falernian* Wines.

IN several of these rocky hills, mineral veins have been found, and from some sources large quantities

quantities of copper and sulphureous ore have been taken up, at the depth of ten feet; and the soil which covers them is a dry gravelly loam, and sufficiently deep. There is another peculiar advantage in this situation, that the severity of the northern wind, so injurious to Vines, is much corrected, by passing over a large tract of *Scotland, England, and St. George's Channel*, and the greatest part of *Ireland*, before it arrives there.

THERE are not wanting in this country several gentlemen of fortune, who make the improvements in agriculture their favourite study and practice. To such, no experiments could give a more rational and elegant amusement, than planting and cultivating a small vineyard, in a favourable situation. Nor could the fruits of any other plantation afford that chearful pleasure, which they would receive, from drinking fine Wines of their own production. The prospect of some success, even from the first trial, seems almost certain, if conducted by the rules given by Mr. *Hamilton* and *Millar*, with the necessary assistance of a good
Vigneron,

Vignerons, well versed in the mechanic operations of this process. Neither is it improbable, but that in some time, several vineyards may be propagated, on account of the *profit* arising from them, and this country supplied with native Wines, very superior to many of those which are now imported.

F I N I S.

E R R A T A.

Page 8, line 15, for *vivid*, read *vifcid*. P. 18, l. 18, for *piecanti*, *r.* *picanti*. P. 26, l. 12, for *deluit*, *r.* *diluit*. P. 37, l. 11, for *contributed*, *r.* *contributing*. P. 39, l. 16, for *Wine*, *r.* *Water*. P. 48, for *fuus cellas*, *r.* *fuis cellis*. P. 50, for *eus*, *r.* *ea*. P. 73, l. 20, for *meliores temperie*, *r.* *melioris temperiei*. P. 80, l. 14, for *acris*, *r.* *aeris*. Ibid. l. 16, for *cella*, *r.* *cellæ*. P. 85, l. 9, for *them*, *r.* *thefe*. P. 92, l. 22, for *ineptam*, *r.* *inaptam*. P. 105, l. 22, for *accepit*, *r.* *accipit*. P. 110, l. 21, for *vineferi*, *r.* *viniferi*. P. 119, l. 17, for *deftributio*, *r.* *distributio*. P. 121, l. 22, for *maximus*, *r.* *maximis*. P. 133, l. 13, for *agonoi*, *r.* *ag onoi*. P. 134, l. 5, for *avayta*, *r.* *avayta*. P. 136, dele *, and the quotation. P. 142, l. 17, for *lædeos*, *r.* *ledæos*. P. 147, l. 17, for *juga*, *r.* *jugum*. P. 149, l. 21, for *temperes*, *r.* *temperies*. Ibid. l. 23, for *temperis*, *r.* *temporis*. P. 151, l. 24, for *prinum*, *r.* *primum*. P. 164, l. 23, for *Grævie*, *r.* *Græv*. P. 174, l. 19, for *nex*, *r.* *nix*. Ibid. l. 21, for *atuen*, *r.* *tum*; for *ægre*, *r.* *ægris*; for *nefacto*, *r.* *nefacto*. P. 176, for *repetitis*, *r.* *repetitis*. P. 184, l. 6, for *is*, *r.* *be*. P. 193, l. 14, for *cay*, *r.* *clay*. P. 216, l. 1, for *efflorence*, *r.* *efflorescence*. P. 235, laft l. for *Kaivov*, *r.* *Δεινον*. P. 238, l. 2, for *Triclinea*, *r.* *Triclinia*. P. 240, l. 22, for *dixi*, *r.* *dici*; and l. 23, for *infiam*, *r.* *initium*. P. 246, for *contraries*, *r.* *confraries*. P. 247, l. 14, for *Sakiai*, *r.* *Sakiai*. P. 272, l. 15, for *arife*, *r.* *arifes*. Page 352, l. 20, for *mirror*, *r.* *mirrour*.

To the B I N D E R.

Place the Plate between Pages 160 and 161.

